KGUARD SECURITY

NVR

USER MANUAL

Mars Home NVR Combo Kit

MH-4140

Default user name: admin
Default password: 123456

About this Manual

The material in this document is for information purpose and is subject to change without prior notice. We made every effort to ensure that this user's manual is accurate and complete. However, no liability is assumed for any errors and omissions that may have occurred.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Declaration of Conformity

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Copyright

Limitation of Liability

- This publication is provided "AS IS" without warranty of any kind, either expressed or implied, including but not limited to, the implied warranties of merchantability, fitness for any particular purpose, or non-infringement of a third party's rights.
- This publication may include technical inaccuracies or typographical errors. Changes may be made to the information herein, at any time, for publication improvements and/or of the corresponding device(s).

Disclaimer of Warranty

In no event shall the supplier be liable to any party or any person, except for replacement or reasonable maintenance of the product, for the cases, including but not limited to the following:

- Any damage or loss, including but without limitation, direct or indirect, special, consequential or exemplary, arising out of or relating to the device;
- Personal injury or any damage caused by inappropriate use or negligent operation of the user;
- Unauthorized disassemble, repair or modification of the device by the user;
- Any problem, consequential inconvenience, or loss or damage, arising out of combining the system with the devices of a third party;
- Any claim or action for damages, brought by any person or organization being a photogenic subject, due to violation of privacy with the result of pictures from a surveillance camera, including saved data, for some reason, becomes public or is used for the purpose other than for surveillance.

Safety Information

Warning

This is the symbol for indicating any potential hazard, risk or condition requiring special attention.
The user needs to refer to the important operating and maintenance or servicing instructions.

Caution

The lighting flash with an arrow head symbol, in an equilateral triangle, is intended to alert the user.
There is dangerous "voltage" presence near by the product's enclosure which may be risk of person.

Safety Precautions

- **Do not touch live electrical parts.**
  Electric shock can be avoided. Follow the recommended practices listed below. Faulty installation, improper grounding, and incorrect operation and maintenance of electrical equipment are always sources of danger.
- **Do not try to install equipment outdoor, during strong wind and rain.**
- **Do not install or remove equipment outdoor, when raining.**
- **Do not try to install or operate any equipment, during a thunderstorm.**
- **Always ground all electrical equipment and the work platform.**
  Prevent accidental electrical shocks. Connect power source, control cabinets, and work platform to an approved electrical ground.
- **Always use the correct cable size.**
  Sustained overloading will cause cable failure and result in possible electrical shock or fire hazard. Work cable should be the same rating as the factory.
- **Always keep cables and connectors in good condition.**
  Improper or worn electrical connections can cause short circuits and can increase the chance of an electrical shock. Do not use worn, damaged, or bare cables.
- **Always avoid open-circuit voltage.**
  The added voltages increase the severity of electric shock hazard.
- **Always wear insulated gloves while you adjust equipment.**
  Electric power should be turned off and insulated gloves should be worn when making any equipment adjustment to assure shock protection.
- **Always wear protective clothing such as long sleeve shirts while you are installing or removing equipment.**
- **Always wear high, snug fitting shoes.**
- **Always wear clean clothes without grease or oil.**
- **Protect neighboring workers from exposure to arc radiation.**
- **Always wear long trousers or jeans while you are installing or removing equipment.**
- **Always wear safety helmet or hard hat and safety shoes before work.**
- **Always keep the equipment in dry places.**
- **Always wear safety harnesses/belt while you work in high places.**
- **Always wear dry clothing and avoid moisture and water.**
- **Always wear Public Safety Vest, while you work at night.**
- **Make sure all electrical connections are tight, clean, and dry.**
- **Make sure that you are well insulated to eliminate electric static charge.**
- **Always wear dry gloves, rubber-soled shoes, or stand on a dry board or platform.**
- **Always follow recognized safety standards.**
- **Always wear correct eye, ear, and body protection.**
- **Always have second person on-site, while you work in dark, poor ventilation, or high places.**
- **Make sure that you are well protected against arc flashes, mechanical injury, or other mishaps.**
- **Make sure that the polarity of wire is correct before installing equipment.**
- **Always handle equipment with care.**
- **Do not block the ventilation of equipment.**
- **Do not put the magnetic parts around the equipment.**
- **Do not put the objects on top of the equipment.**

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Quick Setup Guide

Thank you for purchasing the Mars Home Series Network Video Recorder (NVR). This NVR is developed by KGuard Security and includes the advanced H.264 video encoding and decoding technology for delivering high performance, and ultimate reliability.

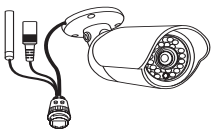
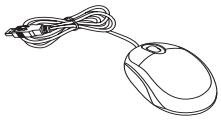
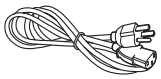
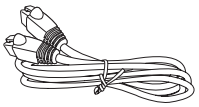
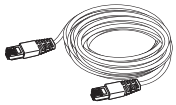
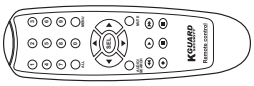
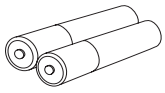
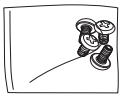
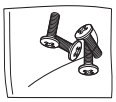
This NVR is able to monitor or record 4 channels. You can define the recording mode for each channel independently or apply the configured settings for some or all of the cameras.

As to the accessibility options, the NVR allows you to see live view from the cameras via smart phone/tablet or PC. For an easy access and backup purposes, you can configure the NVR to send photos or videos from the device directly to the cloud storage (Dropbox or Google Drive). You can also configure the NVR to send Push Notifications directly to your smart phone/tablet if an alarm situation occurs.

Step 1: Unpack Your NVR

Please take a moment to check if all the necessary items are included in the package. If anything is missing or damaged, please contact your retailer immediately.

Mars Home NVR

• NVR	• Stand	• IP camera	• Mouse
			
• 15V/4A power adapter	• Power cord	• HDMI cable	• Ethernet cable
			
• PoC cable	• Remote control	• Battery*	• 2.5”/ 3.5” HDD screws
			
• Camera screw kit			
			

NOTE: * Not available in all countries.

Step 2: Install the Hard Disk Drive (HDD)

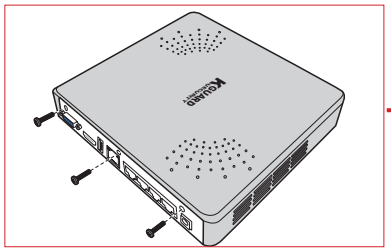
The reason you need to install an HDD on the NVR is to be able to save video footages from the security camera(s). This NVR supports one 3.5” or 2.5” SATA HDD up to 4TB. The installation procedure of 3.5” and 2.5” is slightly different.

CAUTION: DO NOT install or remove the hard disk drive while the device power is turned ON.

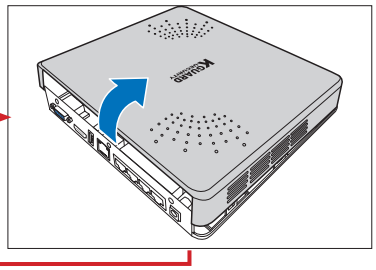
To install the HDD, follow the instructions below.

1. Remove the cover

Loosen the screws as shown.

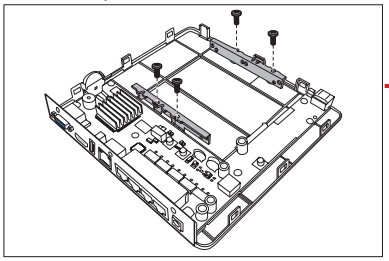


Carefully remove the cover.



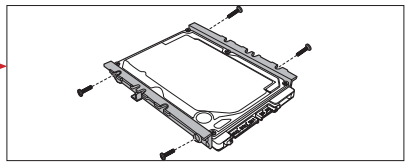
2. Attach the HDD brackets

Remove the screws from the HDD brackets. Then remove the brackets (HDD brackets are put separately in package in some countries).

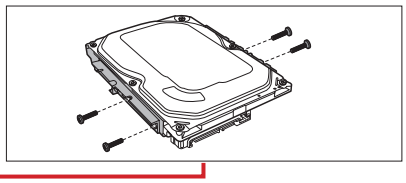


Attach the HDD brackets to the HDD using the supplied 2.5”/3.5” HDD screws.

2.5” HDD

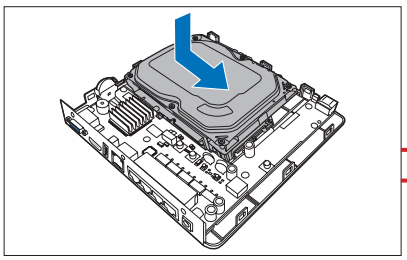


3.5” HDD



3. Connect the HDD

Install the HDD module to the NVR and slide to connect to the SATA connector on mainboard.

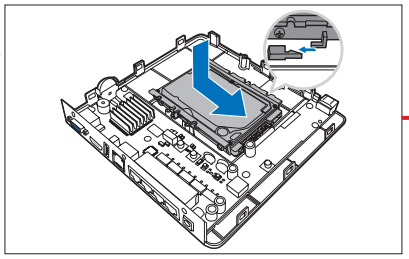


4. Secure the HDD

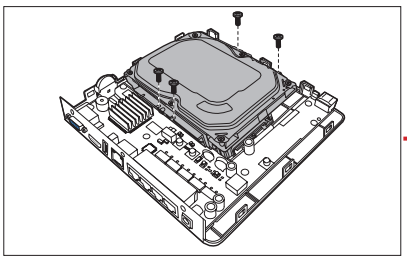
-2.5” HDD: Snap the HDD module into the hooks on the NVR case.

-3.5” HDD: Secure the HDD module to the NVR with the screws.

2.5” HDD



3.5” HDD



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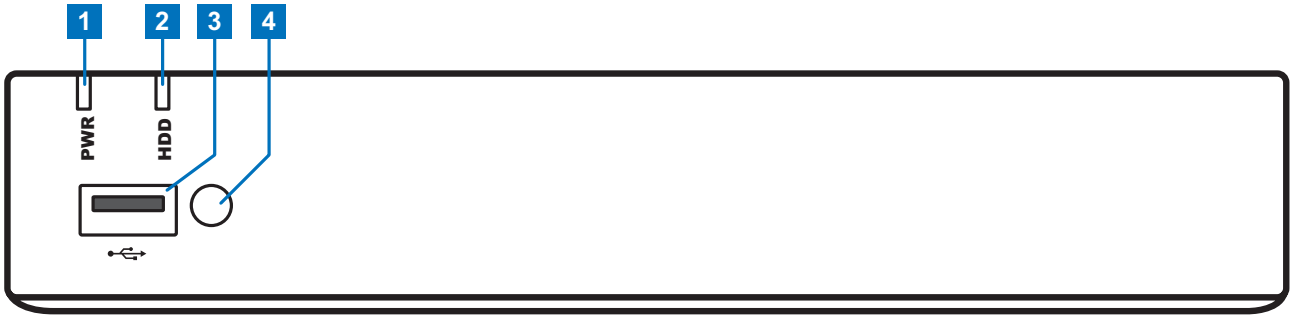
5. Replace the cover

Attach the cover and secure with the screws.

Step 3: Make the Connections

In order to make the connections, you need to know the connection ports and the meaning of the control LEDs. Please take a moment to review the front and rear panel.

Front Panel



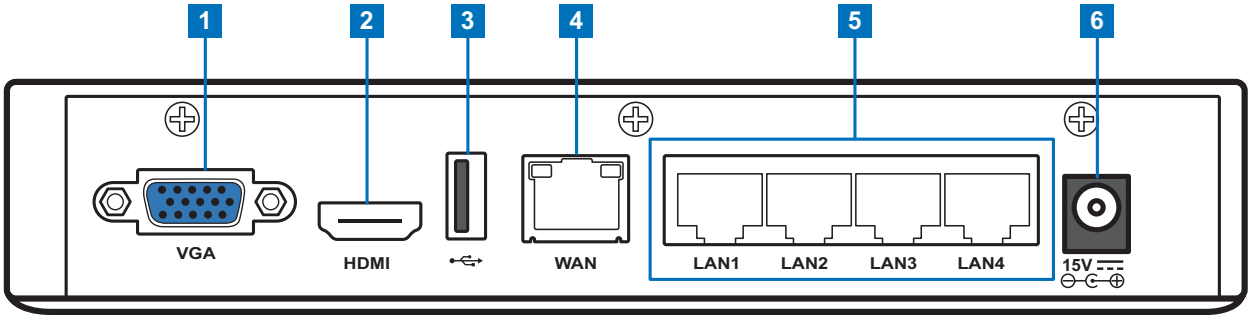
1) Power Indicator: Lights red to indicate the power is turned on.

2) HDD Indicator: Flashing green when the HDD is being accessed (read/write operation).

3) USB 2.0 Port: Connects to a USB mouse, flash disk, and other external storage drive.

4) IR Sensor: Receives the infrared signal from the remote control.

Rear Panel



1) VGA output: Connects to a VGA monitor.

2) HDMI output: Connects to a monitor/TV via HDMI.

3) USB port: Connects to a USB mouse, flash disk, and other external storage drive.

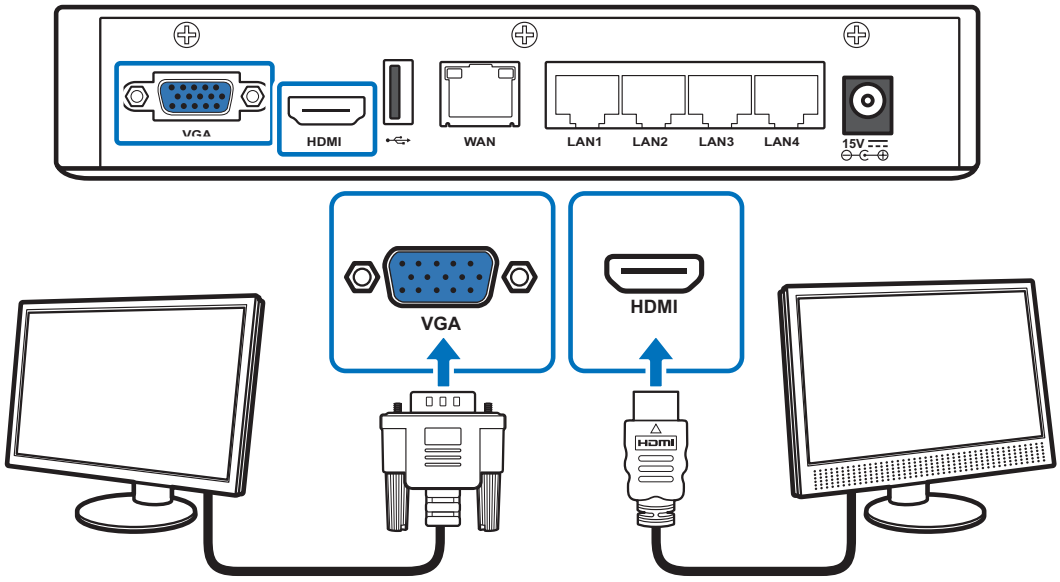
4) WAN Port: Connects to a router via RJ-45.

5) LAN1 ~ LAN4 Port: Main video input from the IP cameras.

6) Power: Connects to the power adapter.

Perform the connections as shown on the diagrams.

1. Connect the monitor/TV to the NVR via HDMI (recommended), or VGA connector.



Connect the video output of the NVR to the monitor via VGA connector.

Connect the video output of the NVR to the monitor/ TV via HDMI output (recommended).

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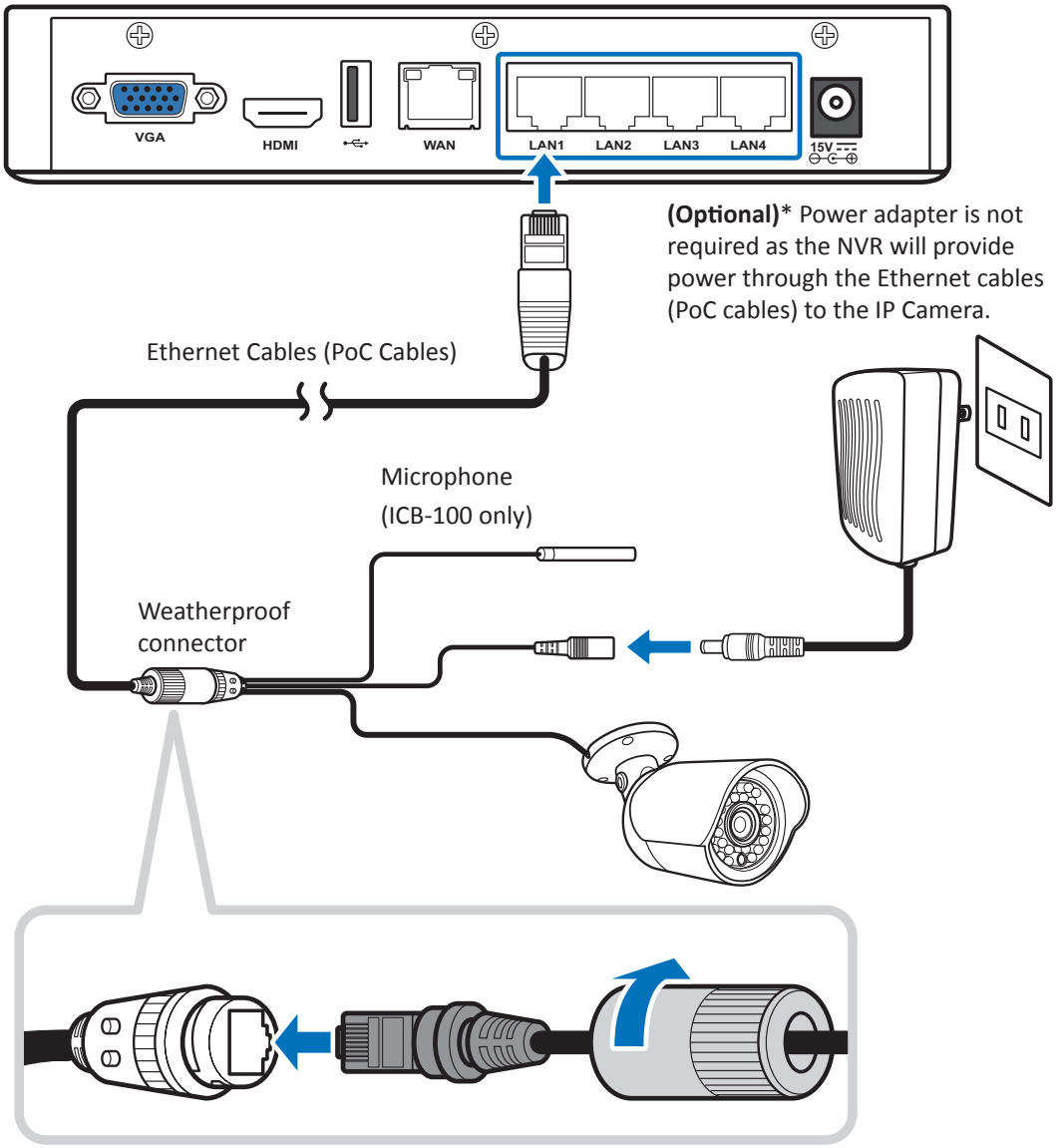
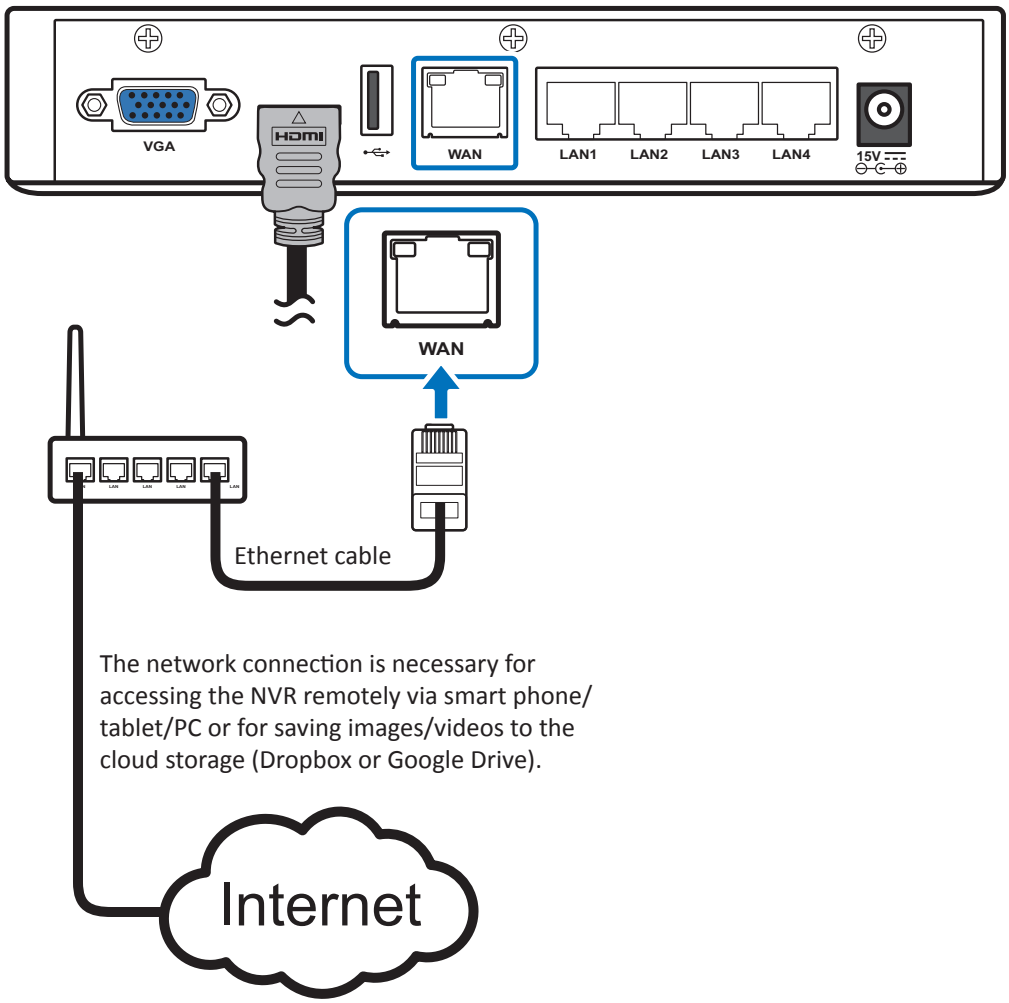
2. Assemble the IP Camera(s)



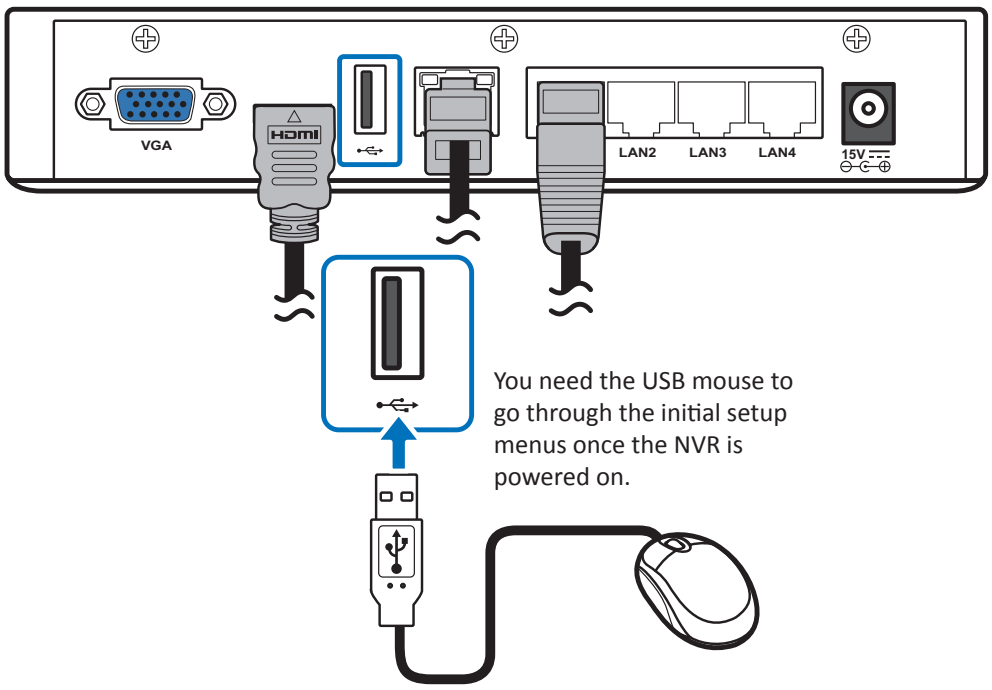
NOTE:

- If the IP camera is installed more than 60m away from the NVR, you need to use an additional power adapter (12V/1A).

3. Connect the NVR to the Internet.



4. Connect a USB mouse to the USB port on the NVR.



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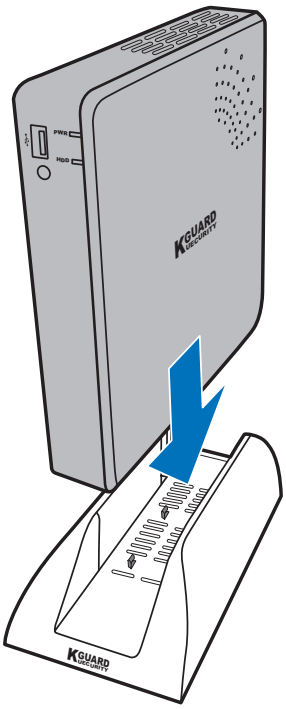
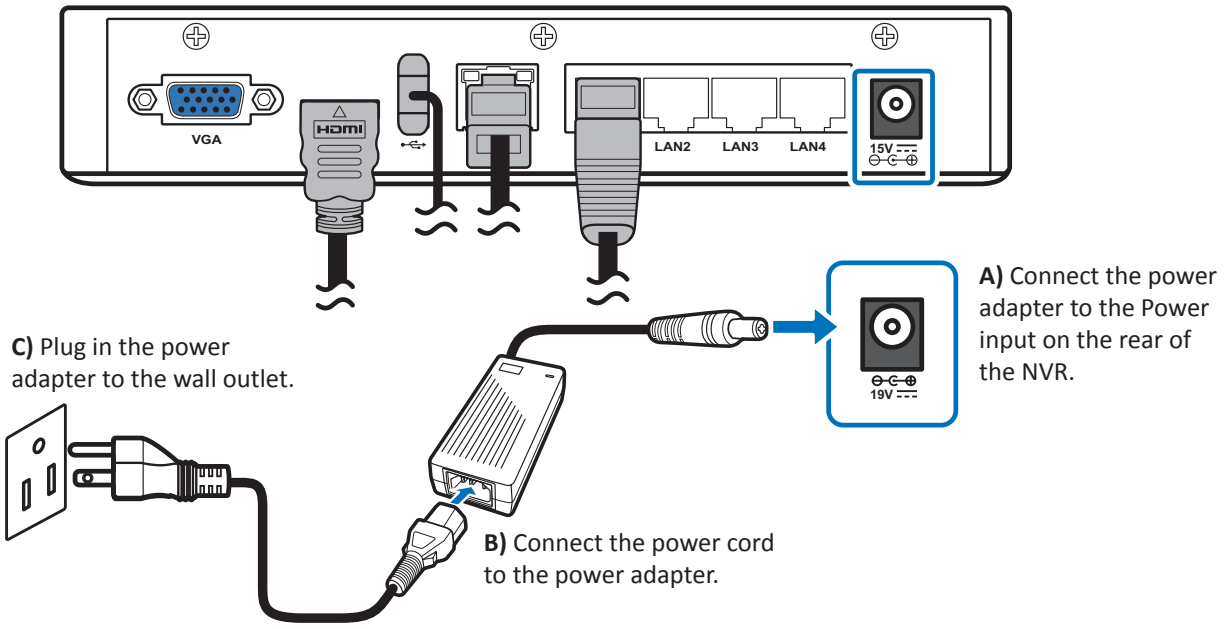
Step 4: Install the NVR to a Stand (Optional)

The NVR is equipped with a stand for the device's vertical installation. To install the NVR to the stand, please refer to the following illustration.



Step 5: Power ON the NVR

Follow the instructions from "A" to "C" on the illustration to power on the NVR.



A) Connect the power adapter to the Power input on the rear of the NVR.

B) Connect the power cord to the power adapter.

C) Plug in the power adapter to the wall outlet.

After the NVR is powered on, the Startup Wizard appears on your monitor/TV screen (please see the next step). If it is the first time you power ON the NVR, we recommend to go through the wizard and fill in the various setup options available.

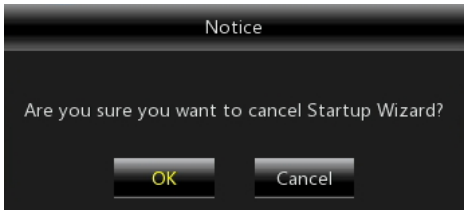
NOTE: If you decide to skip the Startup Wizard, you can still access all the setup options later via the NVR's OSD menu.

Step 6: Go through the Items in Startup Wizard

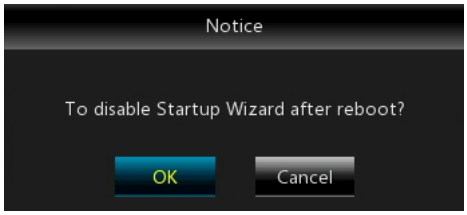
For going through the items on Startup Wizard, the most convenient way is to use the supplied USB mouse. See the USB mouse operations in "Using the Supplied USB Mouse" on page 24.
The wizard includes setup screens which allow you to choose how you want the NVR to operate. All items on the wizard are also accessible via the NVR's Main Menu (see "Main Menu" on page 41).

Startup Wizard

If you do not want to go through the Startup Wizard but access the Live Viewing screen immediately (step 7), you can click **Cancel**. A confirmation message appears on the screen, click **OK**.



If you want to disable the Startup Wizard after reboot, click **OK**.



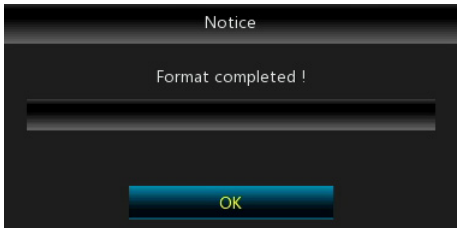
NOTE: All the items on Startup Wizard can be accessed also through the NVR's Main Menu.

Click **Next Step** to move to the next screen.

HDD Wizard

If you start up the NVR for the first time, you need to format the HDD. Only then the NVR can record the footages on it. To format the HDD, check the **Select** checkbox and click **Format HDD**. A warning message opens where you are asked to confirm your selection. Click **OK**.

Wait for the **Format Completed !** notification message to appear on the screen. Click **OK**.



NOTE: Next time you startup the NVR, the recording from the cameras is performed automatically, or based on a defined schedule, and you do not need to reformat the HDD again, unless there is a problem with the hard disk.

Overwrite: Use this option to overwrite the old recordings on the HDD when the HDD is full. For example, if you choose the option 7 days then only the last 7 days recordings are kept on the HDD. To prevent overwriting any old recordings, select **Disable**.

Click **Next Step** to move to the next window.

General Setting

It is very important that the time and date are set correctly. In case of a robbery, for example, the video footage can be used as an evidence in the court, and if the date and time do not match, the footage is not regarded as a legitimate evidence.

Date and Time: The current date and time are displayed on the screen. To change the date and/or time, you need to click on the corresponding field and do the modifications via the on-screen keyboard.

Date Format: Choose how you would like the date to appear on the screen. We recommend to use the standard formats in your location.

Time Format: Choose how you would like the time to appear on the screen. The available options are 24-hour format or 12-hour format (AM/PM).

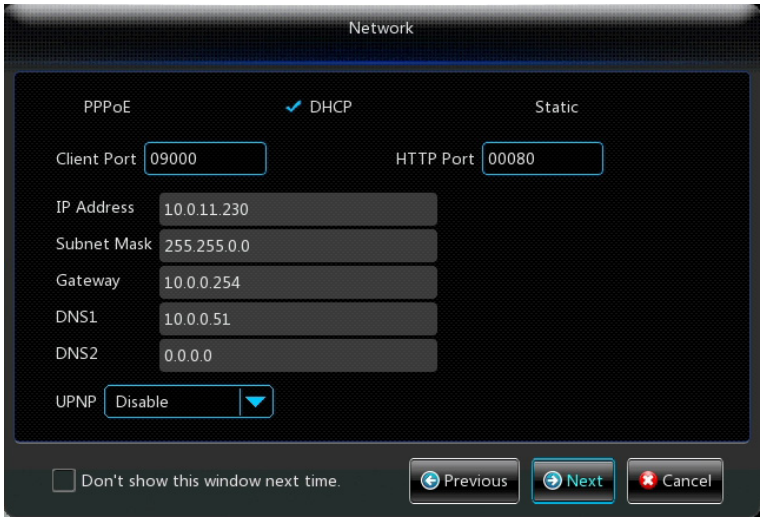
Language: Choose the preferred language you wish the menu items to appear on your NVR.

Flicker: Choose 50 Hz or 60 Hz, depending on your geographical location.

Menu Time Outs: Choose the preferred menu time out. If you want to disable this feature, choose **OFF**.

Click **Next Step** to move to the next window.

Network



Network settings should be configured if you want to connect to the NVR remotely for live viewing or for example, if you want the NVR to synchronize the date and time automatically.

PPPoE / DHCP / Static: Select the network type you are using. The most common types are **DHCP** or **Static**. Most probably your network type is **DHCP**, unless the network is *manually* addressed (usually called- **Static**).

NOTE: If your network type is **Static**, ask your ISP for assistance on determining the IP address, Subnet mask, Gateway, and DNS 1/2 server. If your network type is DHCP, your NVR will obtain the connection parameters, like IP address, Subnet Mask, Gateway and DNS 1/(2) automatically.

Client Port and **HTTP Port**: For time being, keep the default port values. Client and HTTP ports are important for accessing the NVR remotely from a PC via HTTP Interface or smart phone/tablet.

Click **Save** to save the settings. A notification message appears on the screen, click **OK**.

Step 7: Make Sure the Camera(s) are Functioning

It may take up to 1 minute for the Cameras to start transmitting video to the NVR. When you are able to see images on the Live Viewing screen, it means the camera(s) are functioning.

For more information, please see "Understanding the Live Viewing Screen" on page 18.

Step 8: Mount the Camera(s)

If you wish to mount the camera(s), please follow the instructions below:

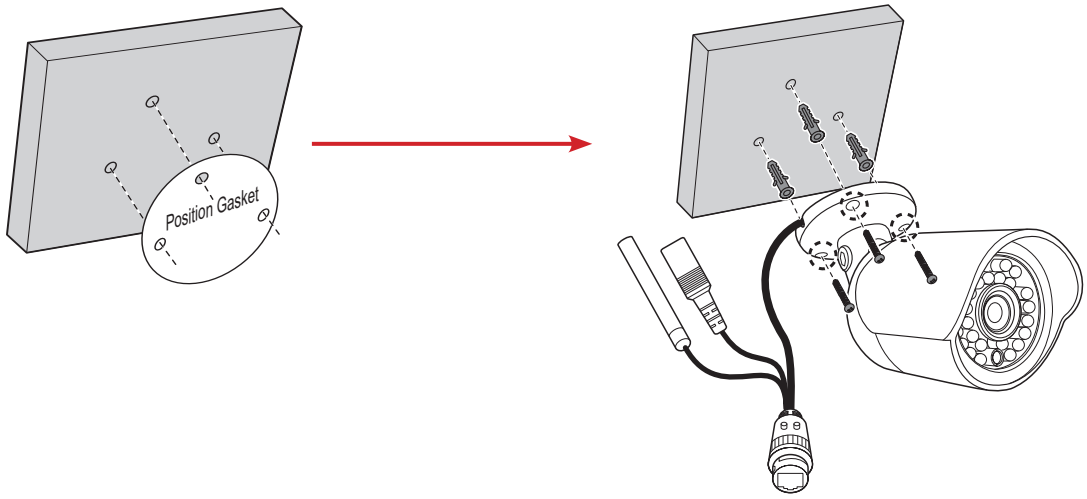
1. Locate your ideal camera position on the selected surface, for example on the wall.

CAUTION: Avoid installing the camera near the indoor lights, for example under fluorescent light, and do NOT point the camera to the light directly.

2. Drill the holes and attach the camera.

Use a position gasket to identify the correct position of the screw holes. Then drill three (3) small holes on the mounting location.

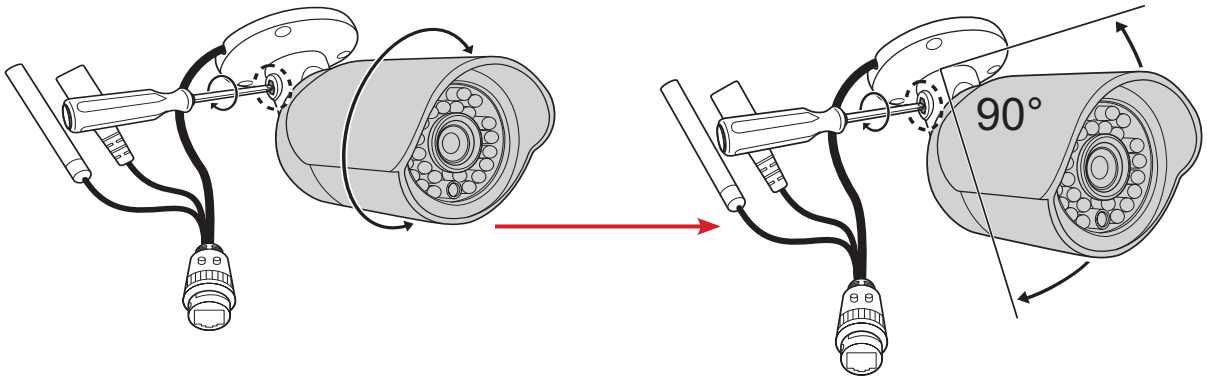
Insert the plastic washers into the holes. Then place the three (3) supplied screws into the three holes at the end of the camera Mount Bracket, and secure them into the holes on the wall, using a screwdriver.



3. Adjust the camera.

Loosen the adjustment screw of the camera, using the star wrench. Adjust the camera position to suit the monitoring area.

When the adjustment is done and the best position is found, tighten the adjustment screw to fix the position.



ENGLISH

Understanding the Live Viewing Screen

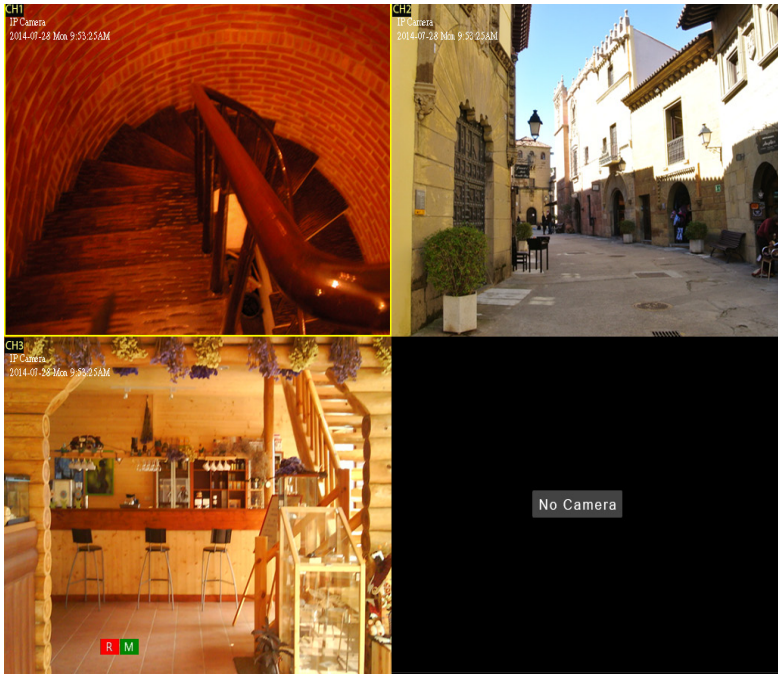
First screen you see after going through or skipping the Startup Wizard, is the Live Viewing screen. It is considered the main screen. On this screen you see the live views from all connected cameras.

- **4 Split Screen**

Live Viewing Screen (4 Cameras Connected)

Those channels that do not have any cameras connected, are in the status “No Camera”.

Live Viewing Screen (No Camera)



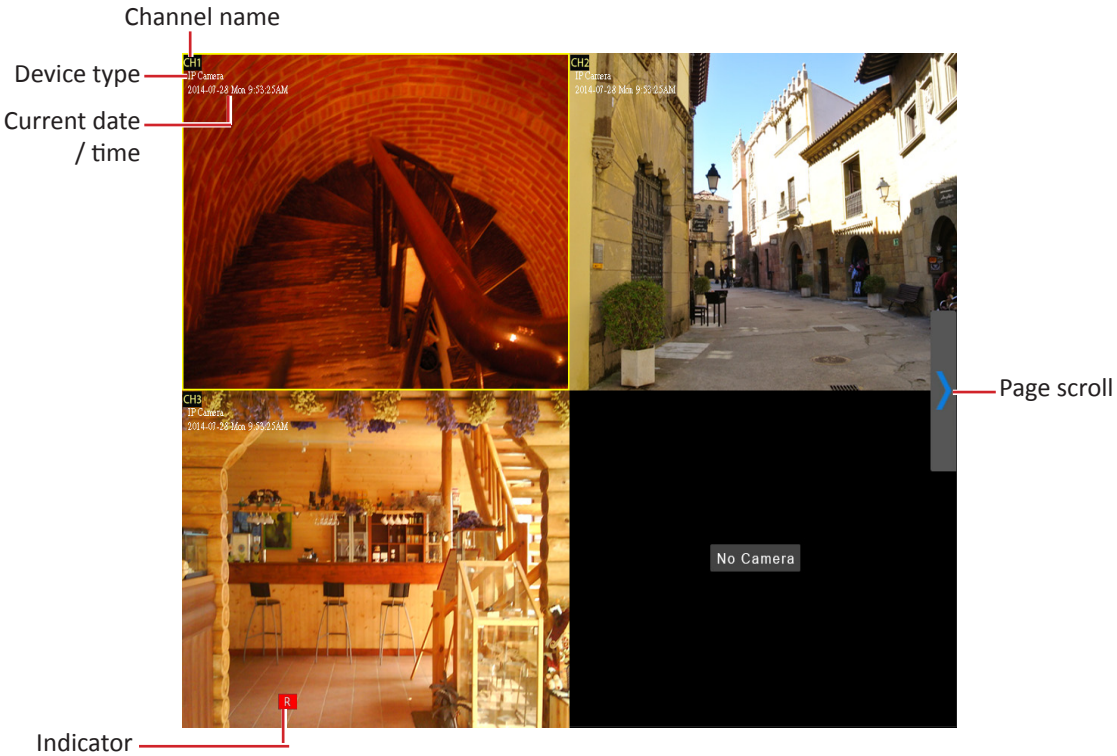
- **Full Screen Mode** (one channel in full screen)

You need to double click on a channel live view, to see the channel in full screen. If you want to exit the full screen mode, double-click, again.

Live Viewing Screen (Full Screen Mode)

The Live Viewing Screen Icons

On a Live Viewing Screen, you can see the channel name, current date and the indicator. These indicators inform you if the video recording is in process, is the motion detected, has the (internal) HDD failed, or is there a connection to the camera(s).

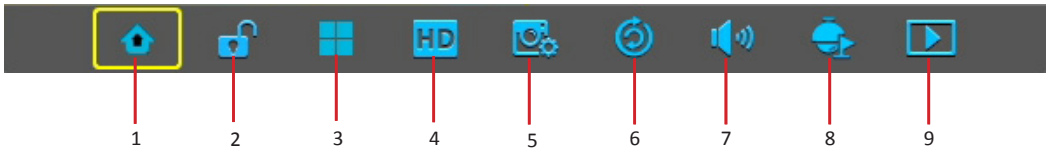


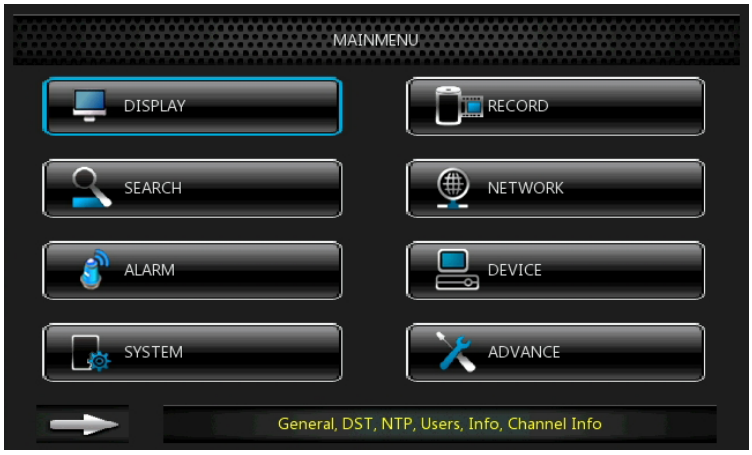
The meaning of the indicators is as follows:

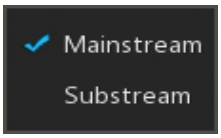
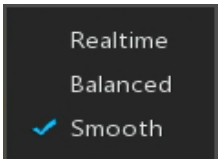
Icon	Description
M	If you see this icon on a live view, it means a motion has been detected on that channel. If you want to enable this function, see "Alarm: Motion" on page 61.
NO HDD	If you see this icon on a live view, it means the NVR cannot detect a HDD or the HDD is not formatted. Please make sure you have installed a HDD into the NVR, see "Step 2: Install the Hard Disk Drive (HDD)" on page 7 or see "Device: HDD" on page 63.
R M	If you see this icon on a live view, it means the video recording is in progress. By default the video recording is enabled for all channels. if you want to change this option, you can disable the recording of a channel, see "Record: REC Para" on page 46. • **R**: Indicates normal recording. • **M**: Indicates motion/alarm triggered recording. If you want to enable this function, see "Alarm: Motion" on page 61.
No Camera	Camera is not connected to the NVR.
< >	When viewing each channel in full screen, use these icons to scroll the Live Viewing page to the left or to the right.

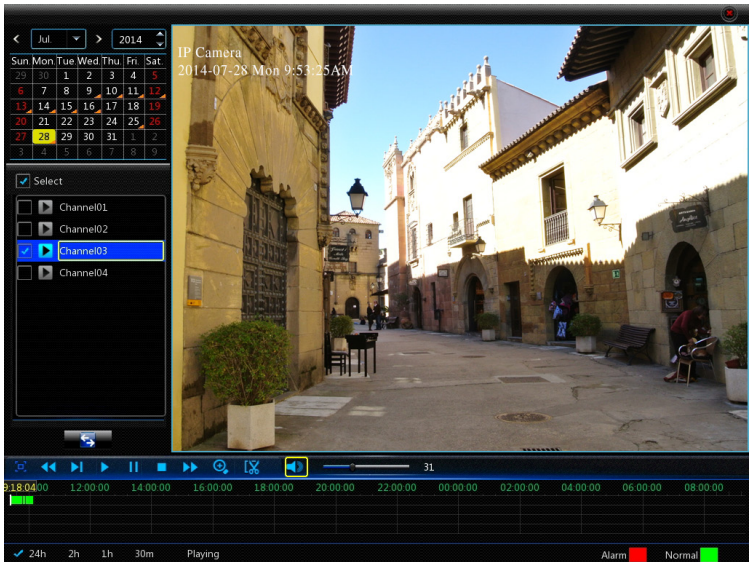
Pop-Up Menu on Live Viewing Screen

Via Pop-up menu you can access the Main Menu, for making modifications to the NVR's configuration and other common features. To bring up the Pop-up Menu, click on the right mouse button on Live Viewing screen or press the MENU button on the remote control.



No.	Button	Description
1	Main Menu	This is the Main Menu where you can configure all the settings of the NVR. 

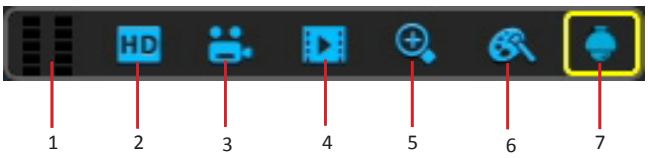
No.	Button	Description
2	Lock	Click to lock access to enter the OSD menu. You need to type the user name and password before entering the OSD menu. Please refer to "Locking the Screen" on page 24. **NOTE:** The default user name and password are "**admin**" and "**123456**".
3	View 4	Switch to a 4-split display. For example, after viewing channels in a full screen mode or in a sequence, switch back to a 4-split display.
4	Stream Switch (for live view resolution)	Click to switch between mainstream (HD resolution) and substream (VGA resolution). **NOTE**: If mainstream (by default) is chosen, the HD icon is visible in the menu. If substream is chosen, the SD icon is visible in the menu. 
5	View Effect (for live view quality)	Click to switch between realtime, balanced, or smooth view. The view effect modes influence only the displayed video quality by bit rate and frame rate but do not influence the recording quality. • **Realtime**: View the realtime quality video from the camera(s). • **Balanced**: View the video from the camera(s) with the quality that depends on the current CPU load of the NVR. • **Smooth**: View the video from the camera(s) with a lower frame rate and bit rate. 
6	Start SEQ	Click (/) to start/stop viewing channels in a sequence. You can set the sequence time in "Display: Output" on page 45.
7	Mute	Click to control the volume. **NOTE**: Click to mute the volume. The icon changes into . The audio function is available only with the ICB-100 camera.
8	Start Cruise (not supported in Mars Home NVR)	You need to set the preset points for each channel through the PTZ control panel. The preset point will act for the camera as a series of cruise movements. Click / to start / stop the Cruise mode for a PTZ camera.

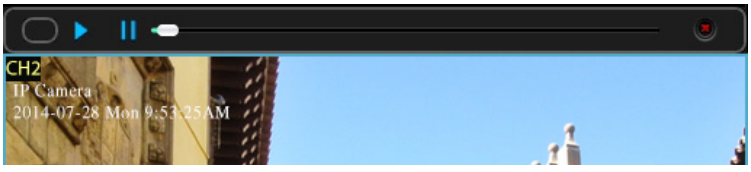
No.	Button	Description
9	Play Back	Click to open the playback window. Choose the date/time and channel for playback. For more details, please refer to "Search: Record Search" on page 48.  **NOTE:** Click to exit the Play Back window.

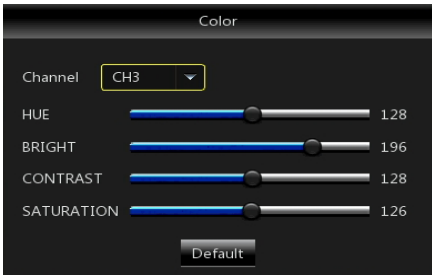
Quick Camera Menu

This menu is for controlling an individual channel. Via Quick Camera menu you can switch stream, start / stop manual recording, view the playback of the recent 5 minutes recording, zoom in / zoom out, configure colors of a specific channel.

To access the Quick Camera menu, left-click on the channel view.



No.	Button	Description
1	Relocate	Click to relocate the Quick Camera menu.
2	Stream Switch	Click HD or SD to switch the channel to mainstream (live view in HD resolution) and substream (live view in VGA resolution).
3	Record	Click / to start/stop manual recording. Please be noted that if you start a manual recording, the recording will stop only when you click again **REC** button.
4	Playback	Click to review the channel playback of the recent 5 minutes recording. **NOTE**: If you want to change the date or channel, use the playback in Pop-up menu ("Pop-Up Menu on Live Viewing Screen" on page 20) or Main menu ("Search: Record Search" on page 48).  **NOTE**: • Click to exit the Play Back window. • Click to relocate the Play Back navigation bar.

No.	Button	Description
5	Zoom	Click to open the channel in full screen. Then mark the area on the channel you wish to zoom in. **NOTE**: Right-click on the channel to exit the zoom mode.
6	Color Setup	Click to configure the color settings of a channel. **IMPORTANT**: Modifications to these settings influence the recorded video quality. 
7	PTZ (not supported in Mars Home NVR)	Click to configure the PTZ (Pan-Tilt-Zoom) settings for a PTZ speed dome camera. • **Channel Select** (CH3): Click to select the channel of the PTZ camera. • **Speed** (50): Scroll the speed scroll bar, to select how fast you want the camera to tilt, pan and zoom. The higher the number, the faster movement. • **Zoom / Focus / Iris**: If you are using a variable zoom PTZ camera, zooming in increases the size of the object on the display but reduces the field of view. Use Focus function to make the image clear on the display. Use Iris function to control how much light gets into the camera. If the view on the screen looks too bright, lower the iris value, if too dark then increase the value. • **Pointer Pan** ( ): Click the direction arrow to select the direction of the PTZ camera. Click the middle icon to switch to auto pan mode.

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Basic NVR Operation

Using the Supplied USB Mouse

The simplest way to operate the NVR is using the supplied optical USB mouse. The USB mouse has two control buttons which function as described below.

Left click: Click to choose an item in the menus and confirm your selection.

Right click: Click to open the Pop-up menu on the Live Viewing screen and to exit from the menus.

Double-click on left button: Double-click on a channel on the Live Viewing screen to view the channel in full screen mode. Double-click again to exit the full screen mode.

Drag an area/line: In motion mode, allows to select the motion area. In menu mode, allows to adjust the values of sliders and scales.

Virtual Keyboard

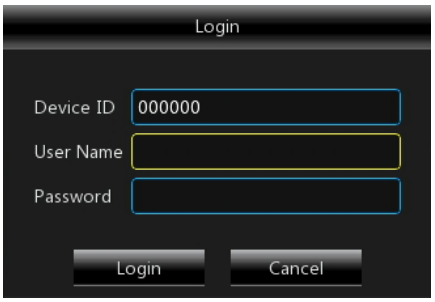
The virtual keyboard automatically appears on the screen if data entry is required.

1 2 3 4 5 6 7 8 9 0 Backspace
q w e r t y u i o p [ ] \
a s d f g h j k l ; ' enter
z x c v b n m , . / ` shift
- =
Click to delete a character.
Click to enter the text.
Click to toggle the keyboard to upper case.

Locking the Screen

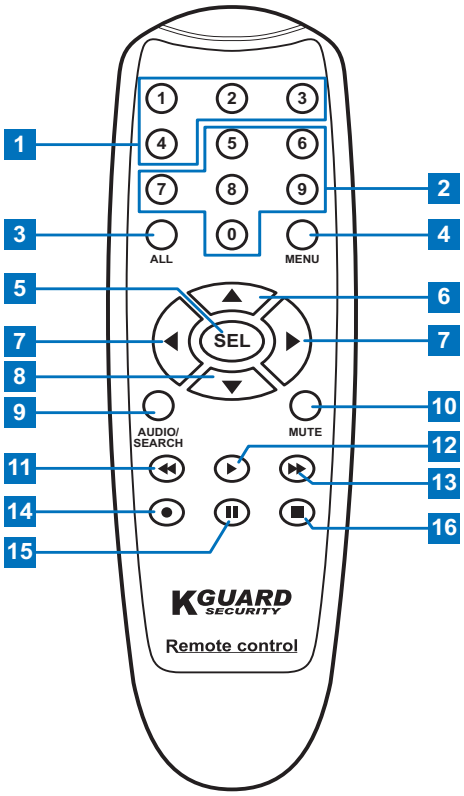
The screen is locked to protect unauthorized OSD operation. You need to enter the user name and password before entering the OSD menu. To lock the screen, click on Pop-Up Menu. Default user name and password is as below:

- User Name: **admin**
- Password: **123456**



For system security, we suggest you change the default password on NVR to protect your privacy. To change the password, please see “System: Users” on page 70.

Using the Supplied Remote Control



No.	Icon	Description
1	1 ~ 4	Numeric keys Press to display channel 1 ~ 4. **NOTE**: The NVR supports only 4 channels.
2	0, 5 ~ 9	Not applicable.
3	ALL	Press to display all channels.
4	MENU	Press to enter or exit the Main Menu.
5	SEL	Press to enter the selected menu item and edit the setting.
6	▲	Press to move up in the Main Menu.
7	◀ ▶	Press to move left or right in the Main Menu.
8	▼	Press to move down in the Main Menu.
9	Audio/ Search	Not applicable.
10	Mute	Not applicable.
11	◀◀	Press to rewind during video playback.
12	▶	Press to play recorded video or enter the recording search menu.
13	▶▶	Press to fast forward during video playback.
14	●	Press to start manual recording.
15	❚❚	Press to pause the video playback.
16	■	Press to stop manual recording or stop the video playback.

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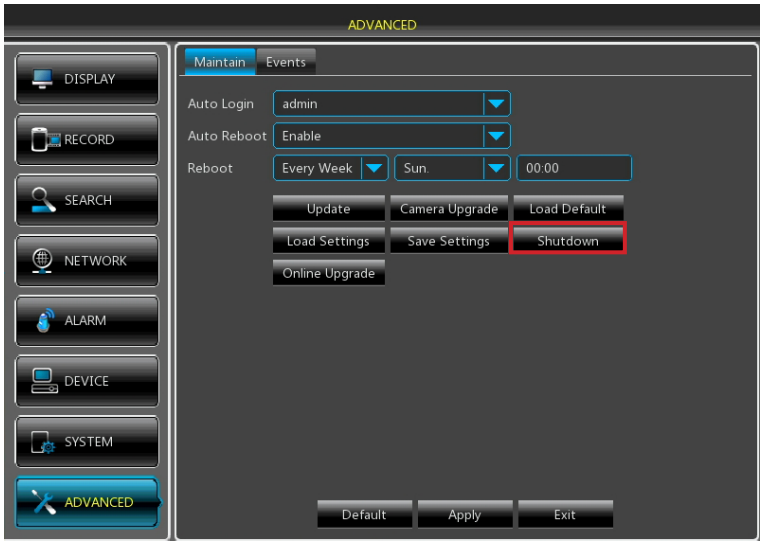
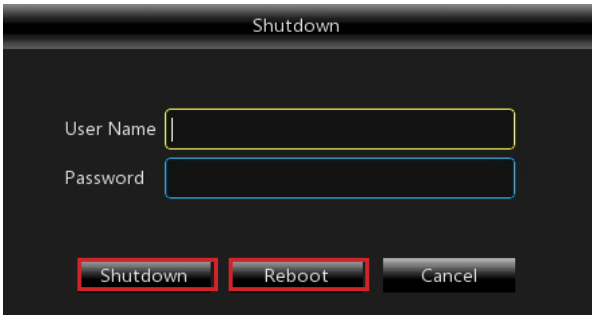
Rebooting/Shutting Down the NVR

To reboot or shut down the NVR, open the **Main Menu-> Advanced-> Maintain** and click **Shutdown**.

CAUTION: To protect your data on the NVR, always shut down the NVR, using the **Shut Down** menu button.



You are prompted to enter the user name and password. Then select **Shutdown** or **Reboot**.



NOTE: After clicking on **Shutdown** button, you are notified that the recording has stopped and you can safely remove the power supply.

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Accessibility Features

How to Connect the NVR to the Network

Step 1: Connect the power adapter to the NVR. See "Step 5: Power ON the NVR" on page 12.

Step 2: Connect an RJ-45 cable from the WAN port on the back of the NVR to an available port on a router. See "3. Connect the NVR to the Internet." on page 11.

Step 3: If you are using Static or PPPoE connection, please configure network settings on NVR. See "Network: Network" on page 54.

NOTE: If you are not sure in the network connection type or in network settings, always ask your Internet Service Provider (ISP).

After the NVR is connected to the Internet, you can connect to the NVR remotely, using a PC or smart phone/tablet. Depending on the remote device (PC or smart phone/tablet), you can see the live view from the cameras, using **KViewQR** app (for smart phone/tablet (iOS/Android)), **KView Center** or **Web Client** (for PC).

For high availability you can configure the NVR to upload photos/video from your cameras to your Dropbox or Google account.

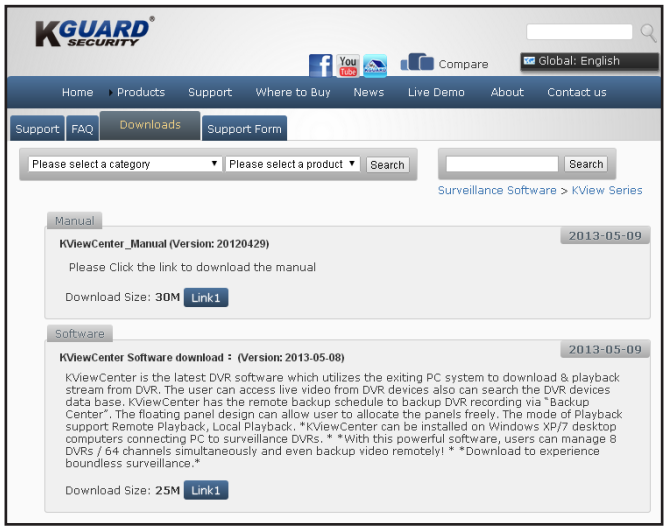
To find out more information on **Web Client**, please refer to "Remote Access Via Web Client" on page 77.

KView Center

Use the **KView Center** to remotely connect to the NVR from your PC. To establish the connection, make sure the NVR is connected to the Internet and you have completed configuring the Port Forwarding.

NOTE: You need to enable the UPNP both on the NVR and on your router. Please refer to "Network: Network" on page 54.

To read the operating instruction on using the **KView Center** and install the software, please go to our website at *http://www.kguardsecurity.com* and open the download page: ***Support*** > ***Download***.


KGUARD SECURITY
Compare
Global: English
Home
Products
Support
Where to Buy
News
Live Demo
About
Contact us
Support
FAQ
Downloads
Support Form
Please select a category
Please select a product
Search
Search
Surveillance Software > KView Series
Manual
2013-05-09
KViewCenter_Manual (Version: 20120429)
Please Click the link to download the manual
Download Size: 30M
Link1
Software
2013-05-09
KViewCenter Software download : (Version: 2013-05-08)
KViewCenter is the latest DVR software which utilizes the exiting PC system to download & playback stream from DVR. The user can access live video from DVR devices also can search the DVR devices data base. KViewCenter has the remote backup schedule to backup DVR recording via "Backup Center". The floating panel design can allow user to allocate the panels freely. The mode of Playback support Remote Playback, Local Playback. *KViewCenter can be installed on Windows XP/7 desktop computers connecting PC to surveillance DVRs. * *With this powerful software, users can manage 8 DVRs / 64 channels simultaneously and even backup video remotely! * *Download to experience boundless surveillance.*
Download Size: 25M
Link1

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KViewQR App

Before using the smart phone/tablet for accessing remotely the NVR, you need to connect the NVR to the Internet.

NOTE: Instead of searching for the **KViewQR App** on App Store (iOS) or Play Store (Android), you can use your smart phone/tablet to scan in the QR code on top of the NVR for accessing the **KViewQR App** download page directly.

The following table describes the compatible devices and platforms:

Platform		Supported Operating System	Free App Name	Get App From
iOS	iPhone	5.0 or above	KViewQR	Apple App Store
	iPad			
Android	Mobile	3.0 or above		Google Play Store
	Tablet			

Quick Reference

Instead of searching for the **KViewQR App**, you can use your smart phone/tablet and simply scan in the QR code on top of the NVR to access the app download page.

Default access information:

- User Name: admin
- Password: 123456

For the remote connection, do the following:

Step 1: Connect the NVR to the network

See "How to Connect the NVR to the Network" on page 27.

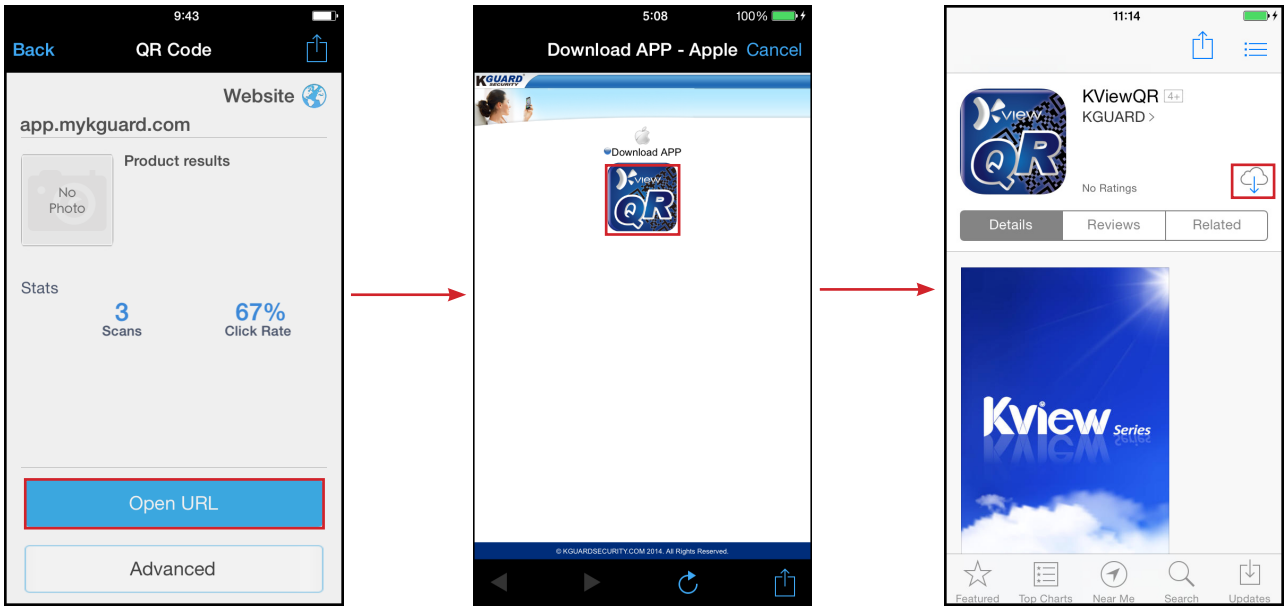
Step 2: Install the APP

a. Use the camera on your smart phone/tablet to scan in the QR code on top of the NVR.
NOTE: You may need to install a QR code scanner app on your smart phone/tablet.
After scanning, a link to the **KViewQR** application is displayed on the screen.

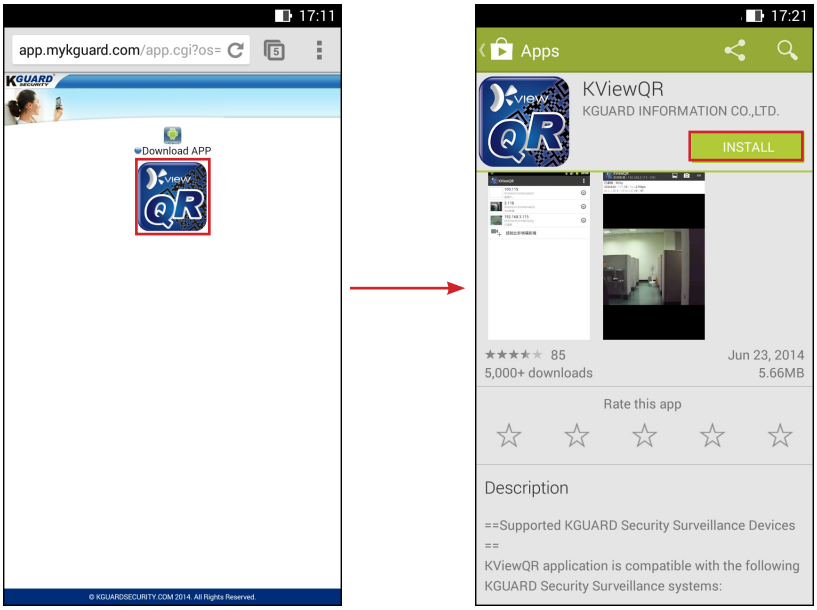
b. Do the following to download the **KViewQR** application on your smart phone/tablet:

1) Tap **Open URL** in iOS or tap on the application link in Android.
2) Tap on the application icon ( ).
3) Download the application.

iOS

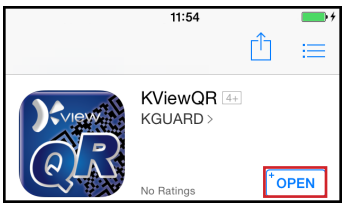


Android

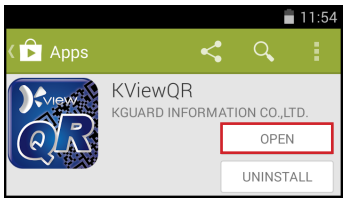


Step 3: Open the application

iOS



Android

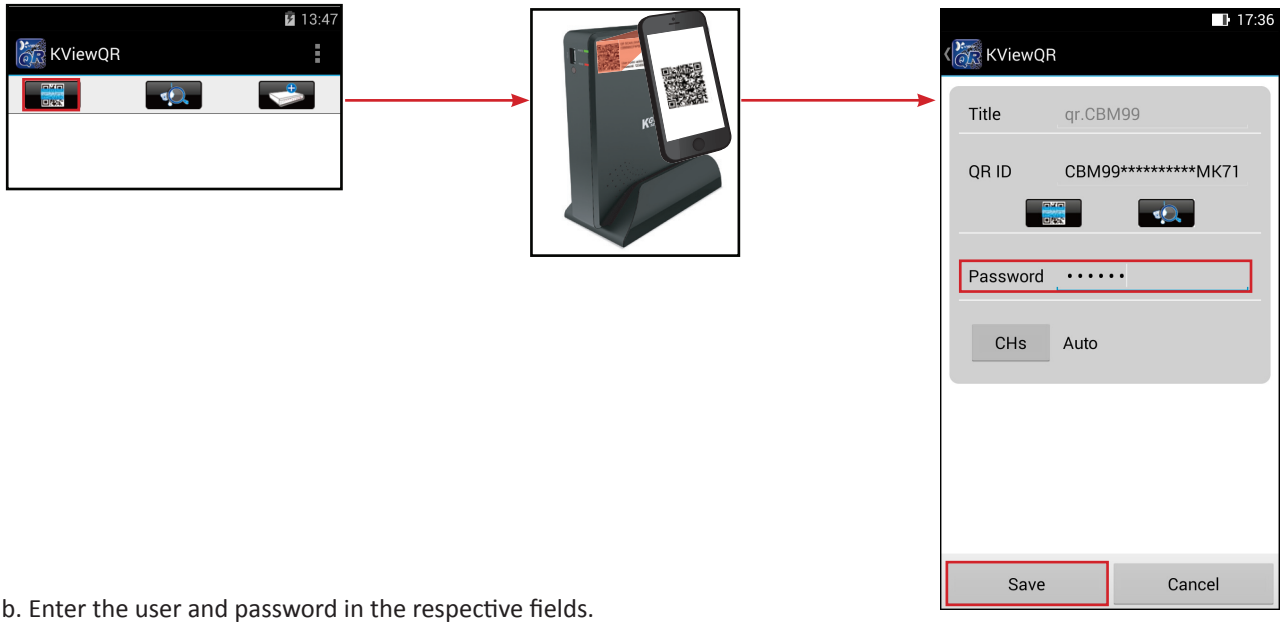


Step 4: Identify and add the NVR

Android:

a. Tap and use the camera of your smart phone/tablet to scan in the QR code on top of the NVR.
The NVR identification page opens.

NOTE: As an alternative, you can identify the NVR by tapping on and search for local devices, or tapping on and enter the NVR ID print on the label manually.



b. Enter the user and password in the respective fields.

NOTE: The default user name is "**admin**" and password is "**123456**".

c. Tap **Save** to save the settings. The NVR will be listed on the **KViewQR** application main page.

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iOS:

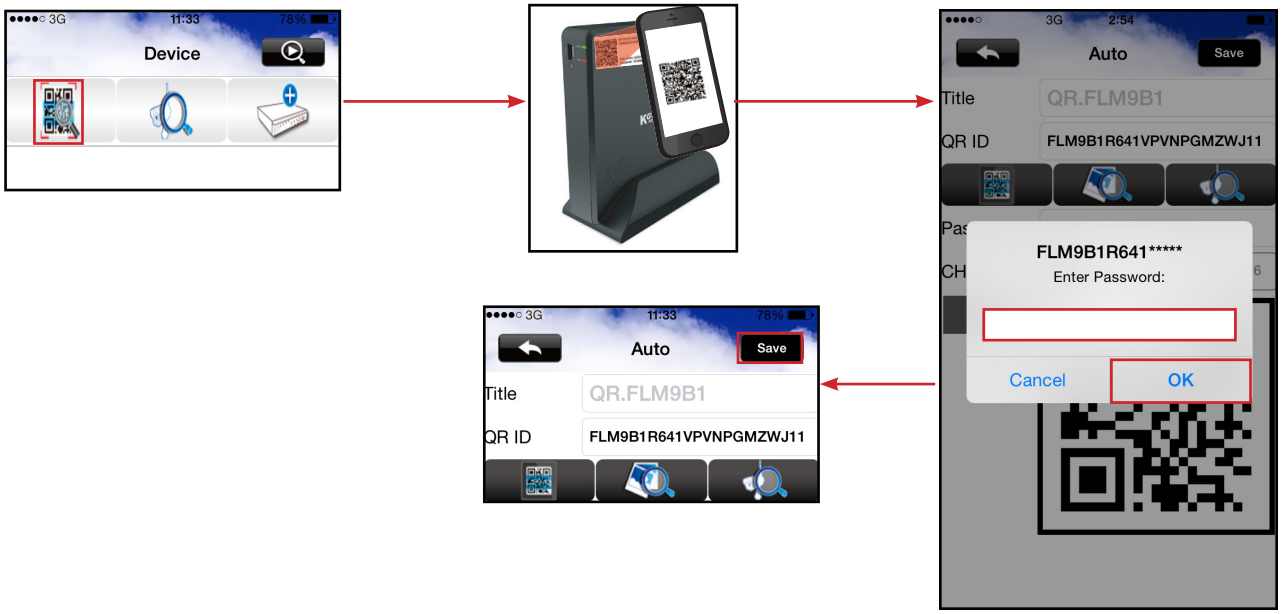
a. Tap and use the camera of your smart phone/tablet to scan in the QR code on top of the NVR.

NOTE: As an alternative, you can identify the NVR by tapping on and search for local devices, or tapping on and enter the NVR ID print on the label manually.

b. Enter the password and tap **OK**.

NOTE: The default user name is "**admin**" and password is "**123456**".

c. Tap **Save** to save the settings. The NVR will be listed on the **KViewQR** application main page.

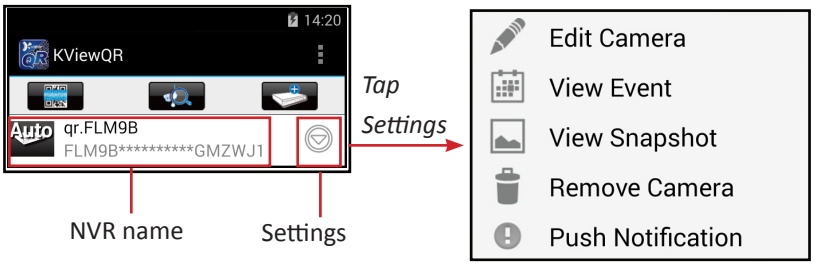


Step 5: View the Live Screen

Android:

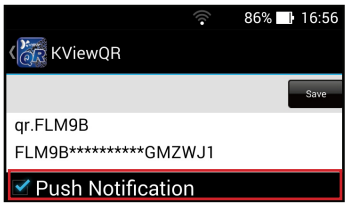
a. Tap on the NVR name to open the live screen.

NOTE: Tap to edit the connection parameters, view camera events, captured snapshots, delete the connection, or configure push notifications.



NOTE: Push notification function helps you to keep current with the events that are detected by the camera(s). When an event occurs or an intrusion is detected, the NVR will automatically send out a push messages to your smart phone/tablet in minutes, even when the APP is off-line. To configure the push notification, do the following:

1) Tap **Push Notification** ( ).
2) Check the **Push Notification** checkbox.
3) Tap **Save**.



NOTE: Make sure to configure the motion detection on NVR.
See "Alarm: Motion" on page 61.

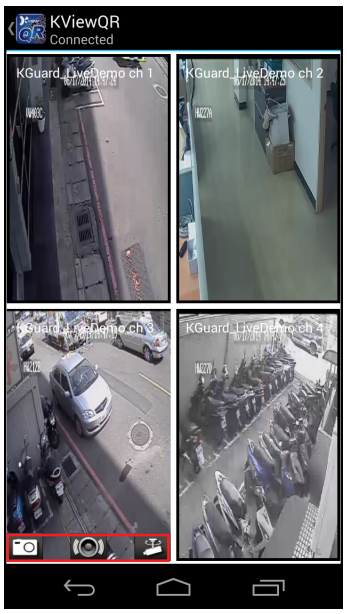
b. On the live view page tap on the channel to do any of the following:

-Tap to capture a snapshot.

-Tap and tap "**MUTE**", "**LISTEN**", or "**SPEAK**" to activate the respective function.

NOTE: "**SPEAK**" function is not supported in Mars Home NVR.

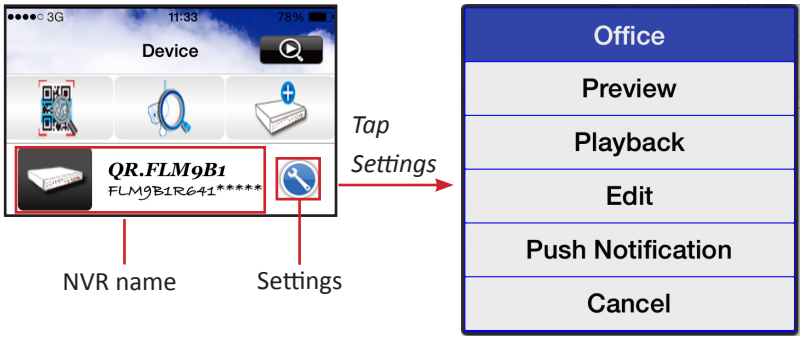
-Tap to adjust the camera direction (not supported in Mars Home NVR).



iOS:

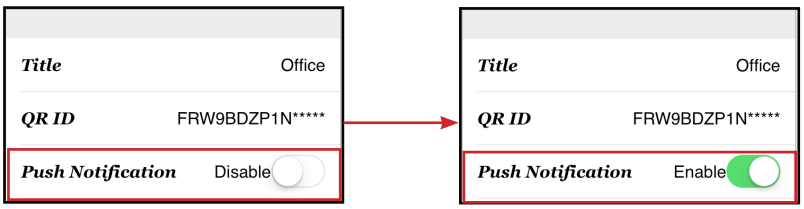
a. Tap on the NVR name to open the live screen.

NOTE: Tap to preview the channels, access playback, edit the connection parameters, configure push notifications, or exit the menu.



NOTE: Push notification function helps you to keep current with the events that are detected by the camera(s). When an event occurs or an intrusion is detected, the NVR will automatically send out a push messages to your smart phone/tablet in minutes, even when the APP is off-line. To configure the push notification, do the following:

1) Tap **Push Notification**.
2) Enable the **Push Notification** function.



NOTE: Make sure to configure the motion detection on NVR. See "Alarm: Motion" on page 61.

b. On the live view page tap on the channel to do any of the following:

-Tap to return to the previous page.

-Tap to change the channel view.

-Tap to access playback and gallery folders.

-Tap and tap listen ( ), mute ( ), or speak ( ) to activate the respective function.

NOTE: "**SPEAK**" function (not supported in Mars Home NVR).

-Tap to adjust the camera direction (not supported in Mars Home NVR).

-Tap to record a video manually.

-Tap to capture a snapshot.

-Tap to view the device information and configure the video quality.

Using Cloud Storage

The Cloud Storage function of your NVR enables you to activate a cloud storage account and send snapshots or videos taken from the connected cameras to virtual storage. This feature allows users to see what is happening on your camera site anytime, anywhere through the Internet.

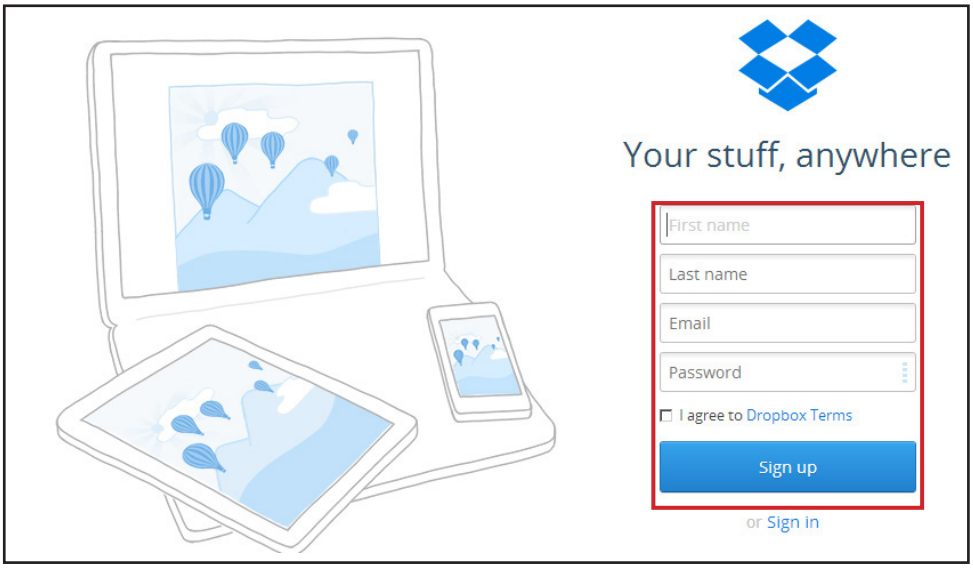
The NVR supports both Dropbox and Google Drive virtual storages but you need to choose only one virtual storage to upload the snapshots or videos. Before setting up the cloud storage on the NVR, you need to make sure your Dropbox account/Google account is created and activated, the hard drive has been installed and formatted in the NVR, and your NVR is connected to the Internet. See "How to Connect the NVR to the Network" on page 27.

Dropbox

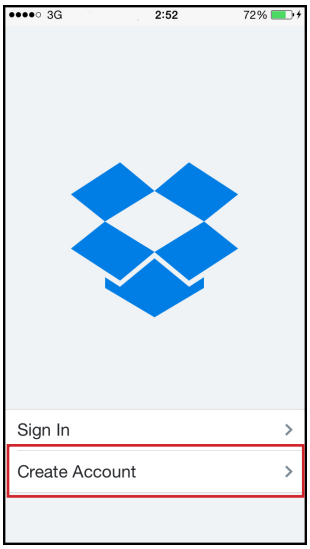
How to Create a Dropbox Account

To create an account for accessing Dropbox service, do the following:

- If you are using a PC, open the web browser and navigate to *www.dropbox.com*. The main page opens. Click on **Sign up**. Fill in the required fields and activate your account.

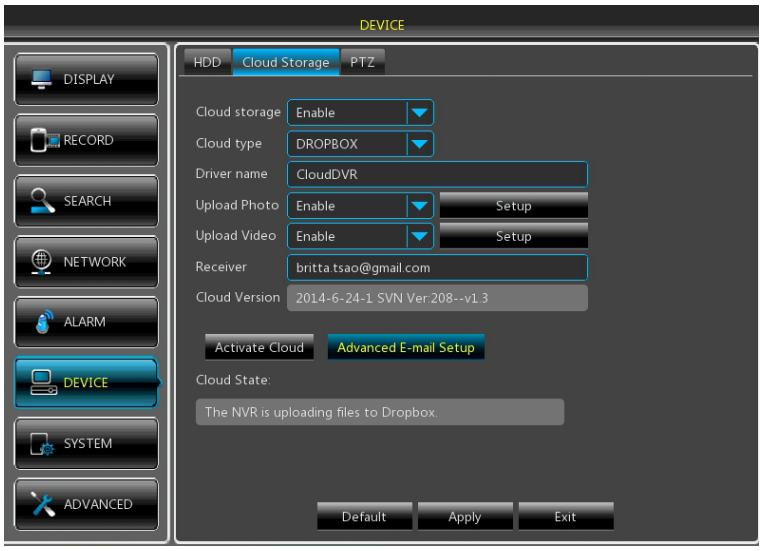


- If you are using a smart phone/tablet then download and open the **Dropbox** app. Click **Create Account**. Follow the on-screen instructions to set up your account.



How to Configure the Cloud Storage Settings for Dropbox

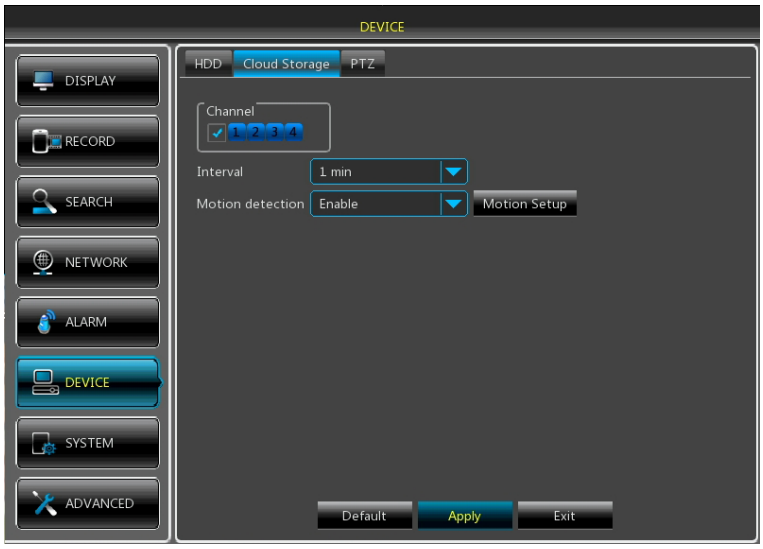
If you already have an active Dropbox account, you need to connect the KGuard Cloud Uploader to your Dropbox. Before making the connection, make sure you have installed a hard drive in the NVR (see "Step 2: Install the Hard Disk Drive (HDD)" on page 7) and formatted the hard drive (see "Device: HDD" on page 63). Then configure the following settings on your NVR (right-click on Live Viewing screen, **Main Menu->Device->Cloud Storage**).



- **Cloud Storage:** Allow cloud settings.
- **Cloud Type:** Select **Dropbox** from the list.
- **Driver Name:** Enter the cloud storage name for your NVR. When linking the KGuard Cloud Uploader to your Dropbox, the **Drive Name** will be used as the folder name where KGuard uploads the snapshots and/or videos.
- **Receiver:** Enter your e-mail address that is associated with your Dropbox account. The NVR will be sending the activation e-mail to this e-mail address for asking your acceptance to link the NVR to the Dropbox.
- **Cloud Version**: Current cloud storage service version.
- **Cloud State**: View the connection status to the virtual drive.

Click **Apply** to save the settings. Then continue configuring the photo/video upload settings.

- **Upload Photo:** Enable and click **Setup** if you want to upload photos from the cameras.



Channel: Select the channels where you want to upload the photos to Dropbox.

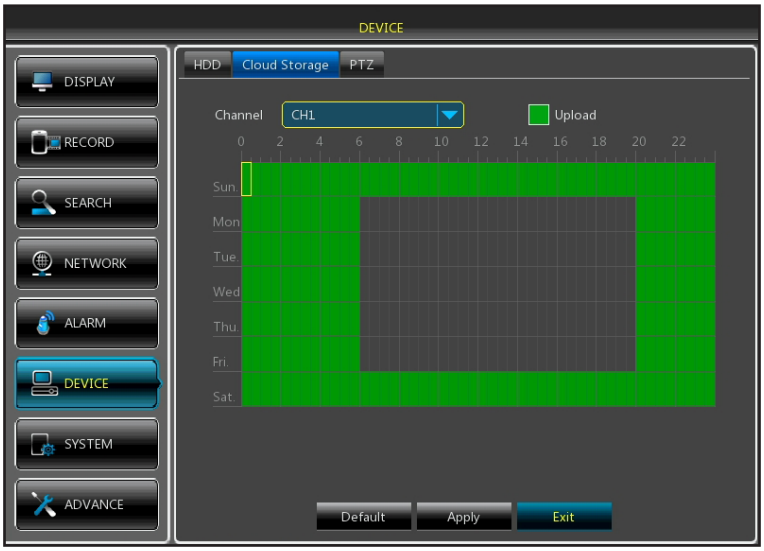
Interval: Set the photo uploading interval.

Motion Detection: Enable if you want to upload photos to Dropbox when the camera detects a motion. Click **Motion Setup** if you have not yet set the motion area. Please see "Alarm: Motion" on page 61.

NOTE: Photos will be uploaded only on a set time interval or if a motion is detected.

Click **Apply** to save the settings for **Upload Photos**.

- **Upload Video:** Enable and click **Setup** if you want to upload videos from the cameras when a motion is detected.



Channel: Select the channel where you want to upload the videos to Dropbox. When the day/time slot is marked green, it means the videos are uploaded to Dropbox when a motion is detected during the specified day/hour.

NOTE:

- You can only choose one channel where to upload videos.
- In one hour the system uploads maximum 3 footages.
- The maximum duration of each uploaded footage is 10 seconds.

Click **Apply** to save the settings for **Upload Video**.

After all settings are complete, click **Apply** and then click **Activate Cloud**. If you successfully receive the cloud storage activation e-mail, you do not need to configure the advanced e-mail settings.

TIP: See the connection status below the screen. For example, a notification of a successful connection:

NOTE: Every time the cloud storage account is changed or HDD is formatted, you must activate cloud again to recognize the changes.

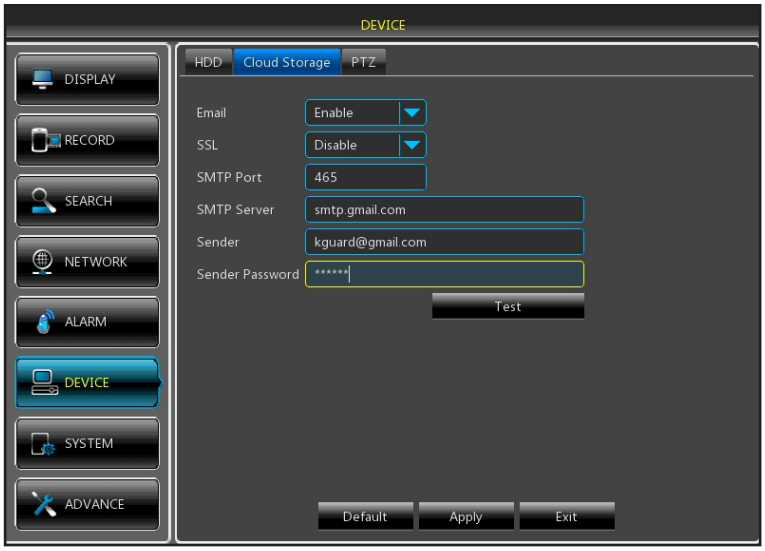
If you need to configure the advanced e-mail settings, click on **Advanced E-mail Setup** button.

Advanced E-mail Setup

If you cannot receive the activation e-mail or do not want to use the KGUARD's SMTP server (default), you can configure the parameters of your SMTP server here.

NOTE: In order to get the activation e-mail, make sure you have filled in the Receiver Email in step "How to Configure the Cloud Storage Settings for Dropbox" on page 33.

After the configuration is done, you can test the settings by clicking on **Test** button.



- **Email:** Enable advanced e-mail setup.
- **SSL:** Enable if your e-mail server requires the SSL verification. If you are not sure, please consult your e-mail service provider. For example, if you are using Gmail then this option should be enabled.
- **SMTP Port:** Enter the SMTP port of your e-mail server. For example, if you are using Gmail, the SMTP port is 465.
- **SMTP Server**: Enter the SMTP server address of your e-mail.
- **Sender**: Enter the e-mail address of your e-mail. This e-mail address is used by the NVR only for sending you the activation e-mail for asking your acceptance to link the NVR to the Dropbox.
- **Sender Password**: Enter the password of your e-mail.

After all settings are complete, click **Apply**. For testing the settings, click **Email Test**.

Activate Cloud

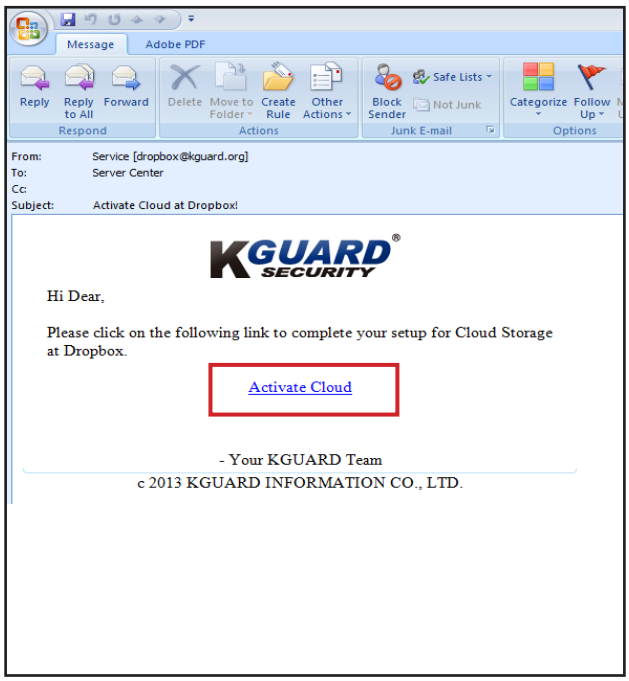
After you finish configuring the Cloud Storage settings, click **Active Cloud** to let the NVR to link to Dropbox. When the linking is done, an activation e-mail will be sent to the Receiver's e-mail account.

Notice
The activation mail has been sent successfully, please check email: xxxxx@gmail.com and activate the cloud through the link in 3 minutes
OK

NOTE: Instead of checking e-mail, you can also use your smart phone/tablet to scan in the QR code displayed on the activation notification message for completing the activation. Please refer to "For smart phone/tablet users:" on page 36.

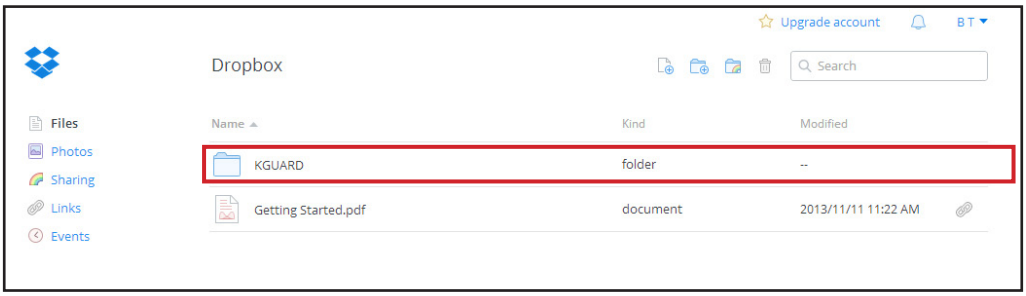
Click **OK** to continue.

NOTE: Please check e-mail and click on **Activate Cloud** link within 3 minutes.



- For PC users:

  Follow the on-screen instructions to complete the cloud account activation. When the activation is complete, a new folder is added to your Dropbox folder list.



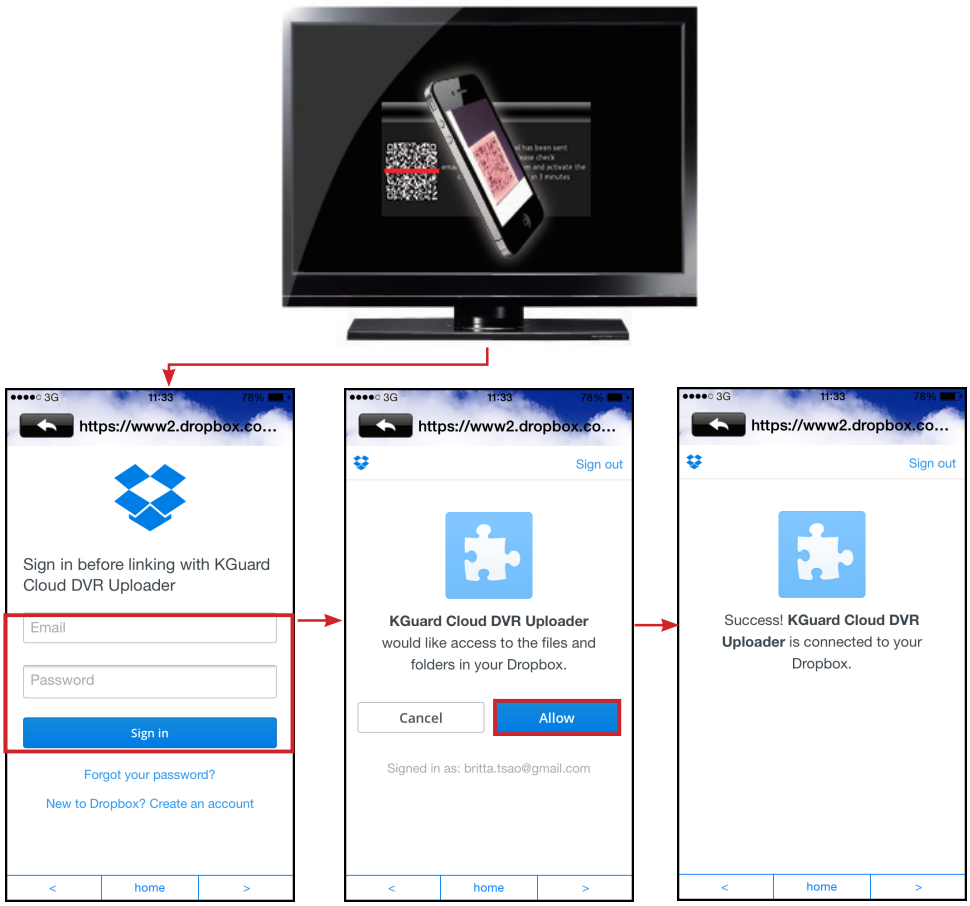
- For smart phone/tablet users:

  Download **KViewQR** app and use the QR scanner to scan the QR code on the cloud storage activation message on the screen of the NVR. About **KViewQR** app, please see "Step 2: Install the APP" on page 28.

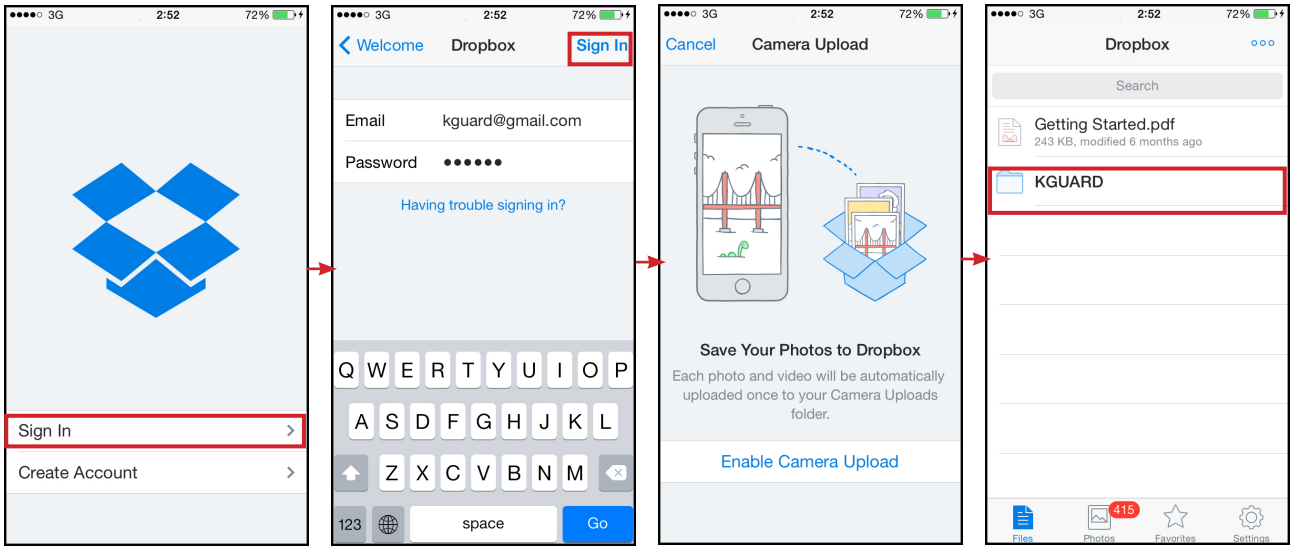
  Then enter your Dropbox e-mail address and password and click **Sign In** to activate the cloud storage.

  Follow the on-screen instructions to complete the cloud account activation. When the activation is complete, a new folder is added to your Dropbox folder list.

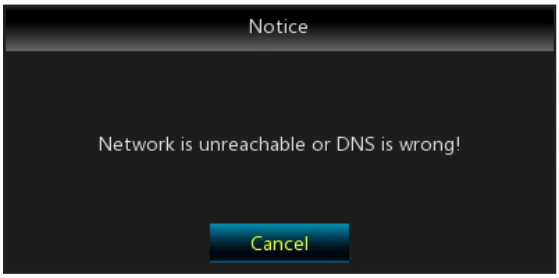
Please see the following image in the next step for reference.


https://www2.dropbox.co...
Sign in before linking with KGuard Cloud DVR Uploader
Email
Password
Sign in
Forgot your password?
New to Dropbox? Create an account
Sign out
KGuard Cloud DVR Uploader would like access to the files and folders in your Dropbox.
Cancel
Allow
Signed in as: britta.tsao@gmail.com
Success! KGuard Cloud DVR Uploader is connected to your Dropbox.

To view the uploaded photos and/or videos, open the Dropbox app in your smart phone/tablet and log in with your account.



NOTE: If you receive the following error, please check if the NVR is connected to the internet. See "How to Connect the NVR to the Network" on page 27.



ENGLISH

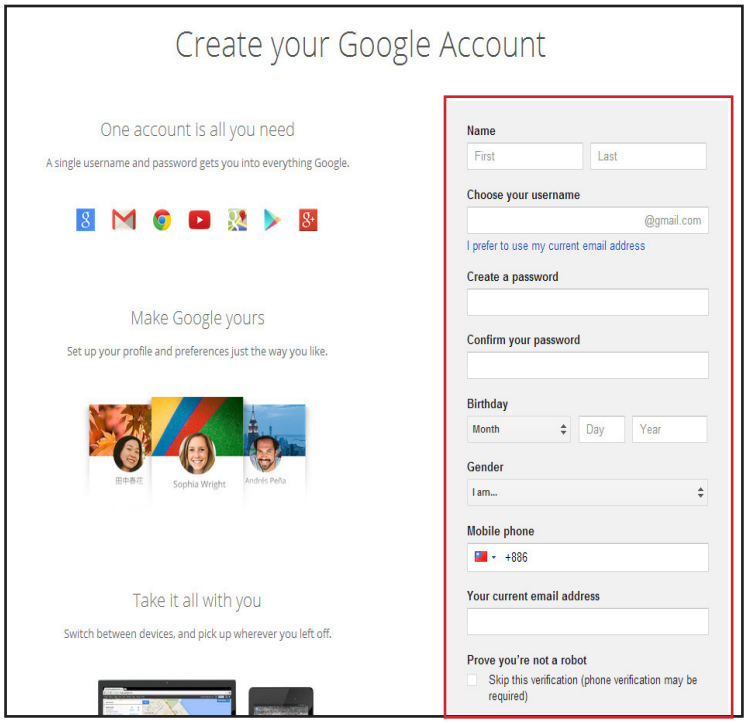
Google Drive

How to Create a Google Account

NOTE: If you already have a Google account, please skip this section.

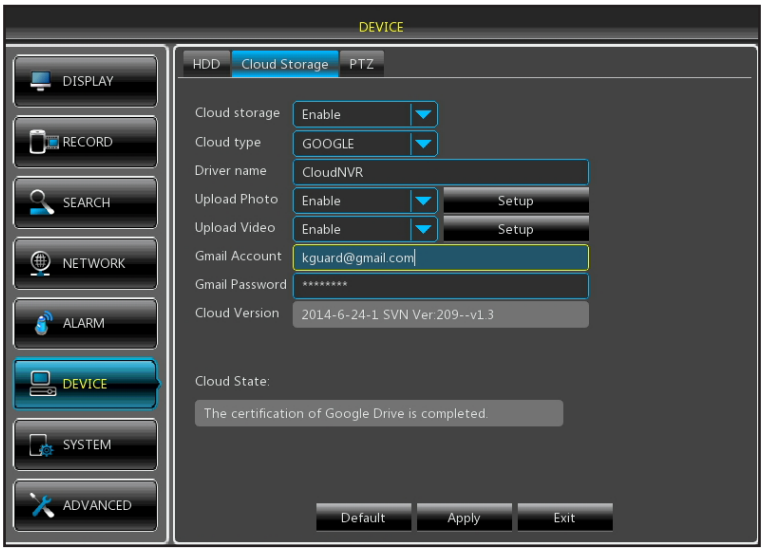
To create an account for accessing Google service, do the following:

- Open the web browser and navigate to *https://accounts.google.com/SignUp* and fill in the requested information.



How to Configure the Cloud Storage Settings for Google Drive

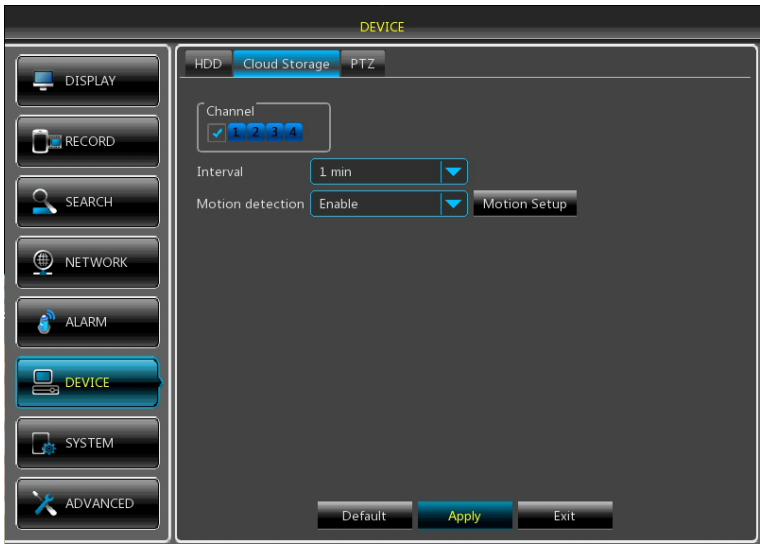
If you already have an active Google Drive account, you need to connect the KGuard Cloud Uploader to your Google Drive. Before making the connection, make sure you have installed a hard drive in the NVR (see "Step 2: Install the Hard Disk Drive (HDD)" on page 7), formatted the hard drive (see "Device: HDD" on page 63). Then configure the following settings on your NVR (right-click on Live Viewing screen, **Main Menu->Device->Cloud Storage**).



- **Cloud Storage:** Allow cloud settings.
- **Cloud Type:** Select **Google Drive** from the list.
- **Driver Name:** Enter the cloud storage name for your NVR. When linking the KGuard Cloud Uploader to your Google Drive, the **Driver Name** will be used as the folder name where KGuard uploads the snapshots and/or videos.
- **Gmail Account**: Enter your Gmail account in the format <*username*>*@gmail.com*. For example, kguard@gmail.com.
- **Gmail Password**: Enter the password of your Gmail account.
- **Cloud Version**: Current cloud storage service version.
- **Cloud State**: View the connection status to the virtual drive.

Click **Apply** to save the settings. Then continue configuring the photo/video upload settings.

- **Upload Photo:** Enable and click **Setup** if you want to upload photos from the cameras.



Channel: Select the channels where you want to upload the photos to Google Drive.

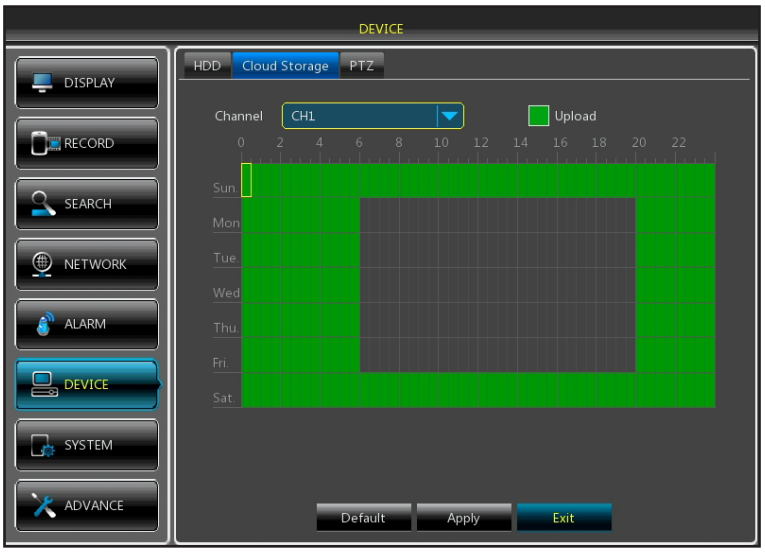
Interval: Set the photo uploading interval.

Motion Detection: Enable if you want to upload photos to Google Drive when the camera detects a motion. Click **Motion Setup** if you have not yet set the motion area. Please see "Alarm: Motion" on page 61.

NOTE: Photos will be uploaded only on a set time interval or if a motion is detected.

Click **Apply** to save the settings for **Upload Photo**.

- **Upload Video:** Enable and click **Setup** if you want to upload videos from the cameras when a motion is detected.



Channel: Select the channel where you want to upload the videos to Google Drive. When the day/time slot is marked green, it means the videos are uploaded to Google Drive when a motion is detected during the specified day/hour.

NOTE:

- You can only choose one channel where to upload videos.
- In one hour the system uploads maximum 3 footages.
- The maximum duration of each uploaded footage is 10 seconds.

Click **Apply** to save the settings for **Upload Video**.

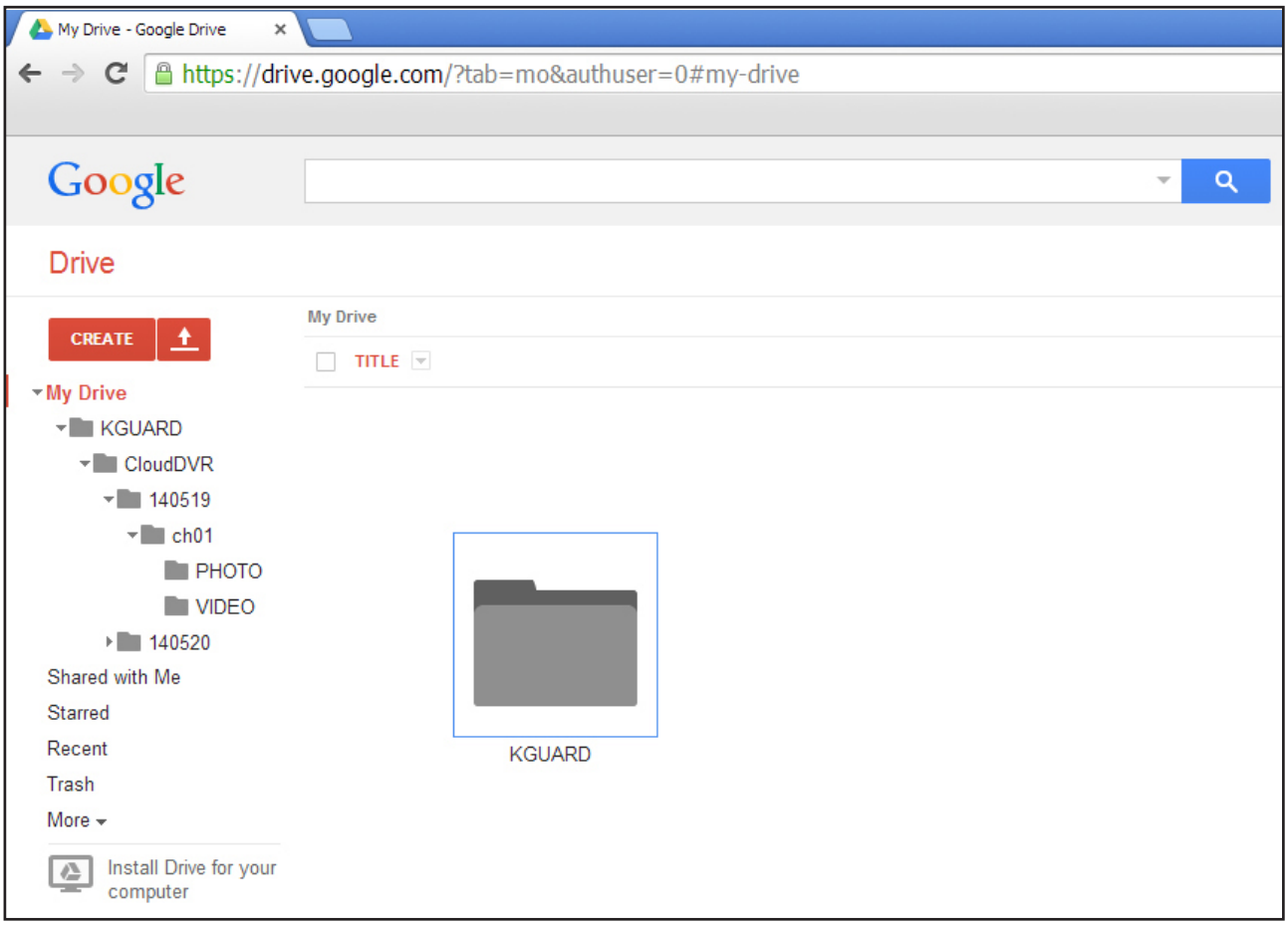
After all settings are completed, click **Apply** in **Cloud Storage** menu.

TIP: See the connection status below the screen. For example, a notification of a successful connection:

Check the Photos/Videos on Google Drive

To check the uploaded photos/videos from the NVR on Google Drive, do the following:

- Open the web browser and navigate to *https://drive.google.com*.
- Log in to your Google account and review the uploaded photos/videos from the NVR.



The connection between the NVR and Google Drive is established.

Operating the NVR

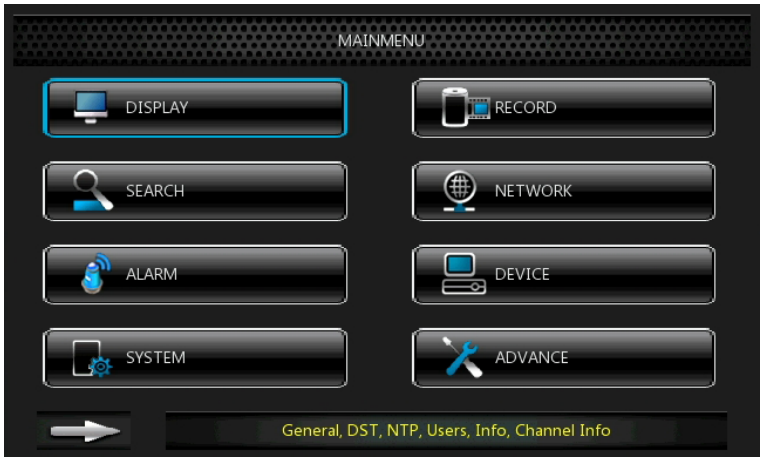
You probably come to this section because the default configuration of the NVR does not quite satisfy your needs, or you wish to learn more about your NVR. Therefore you need to access the NVR's settings menu (Main Menu). The Main Menu can be accessed locally or via a **Web Client**. More information on **Web Client**, please see "Remote Access Via Web Client" on page 77.

Through Main Menu you may want to modify the following common settings:

- **Motion Detection:** Enable to send Push Notifications to your smartphone/tablet. See "Alarm: Motion" on page 61.
- **(Recording) Schedule:** To set up your own recording schedule. See "Record: Schedule" on page 47.
- **Network:** Configure the NVR's access parameters to the network. See "Network: Network" on page 54.

Main Menu

Right-click on Live Viewing screen and click on .



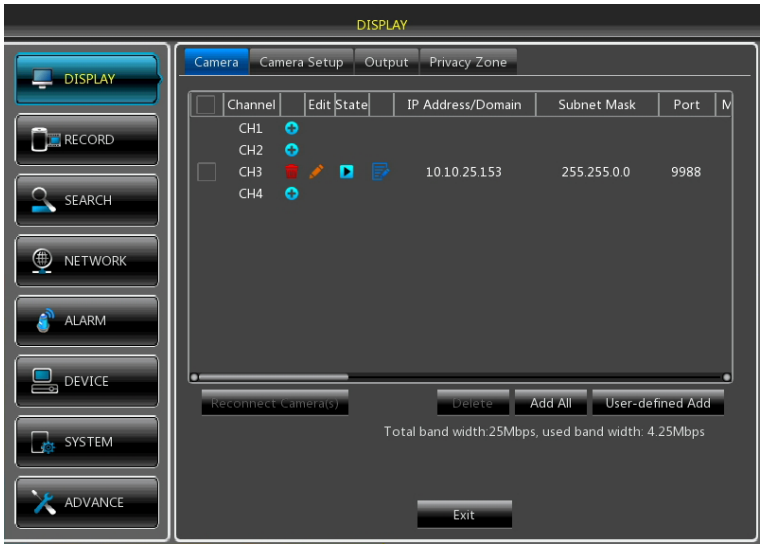
- **Display**: Configure everything to do with displaying, footage color setup, video output resolution, setting privacy zones and more.
- **Record**: Configure the recording options (for example, resolution) and setting up recording schedules for channels.
- **Search**: Search for recordings (play the recording option), events and logs by different types.
- **Network**: Configure the NVR's access parameters to the network, define the parameters (for example, resolution) for the remote stream, configure e-mail settings for receiving notifications and DDNS parameters.
- **Alarm**: Set the motion area and sensitivity (very important parameters when configuring an NVR), configuring the alarm settings (what happens if an alarm occurs).
- **Device**: View how many hours of recording the internal HDD provides and decide the HDD overwrite options. Here you can also configure the PTZ configuration parameters (not supported in Mars Home NVR) and connection parameters to link your NVR to your Dropbox account or Google Drive.
- **System**: Here you can configure the date and time parameters, change the language of the NVR's interface, modify users and view the general information about the system. In this menu you can also see the QR code for accessing your NVR from your smart phone/tablet.
- **Advanced**: Modify the basic maintenance tasks (for example, scheduled reboot). Determine the startup options, perform the firmware update, safety shut down the system.

NOTE: Click **Apply** to save changes, click **Exit** to close the menu (or right-click on the menu), click **Default** to restore default values. Click **Copy / To**, to copy the current settings to all channels or one specific channel.

ENGLISH

Display: Camera

On this page you can see the online/connected cameras.

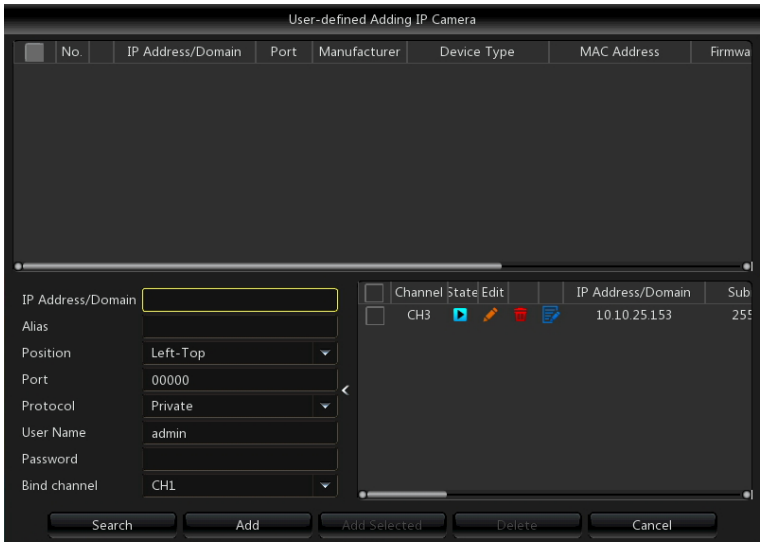


- **Select Box ( ):** Check in the title bar to mark all cameras or next to a camera, to select that specific camera.
- **Channel**: Display camera name.
- **Add/Delete ( )/( )**: Click to add or delete a camera (not supported in Mars Home NVR).
- **Edit ( )**: Click to modify the camera's settings (not supported in Mars Home NVR).
- **State ( )**: View the camera state (online/offline).
- **Modify ( )**: Click to make modifications to the camera (not supported in Mars Home NVR).
- **IP Address/Domain**: Display the camera's IP address/domain.
- **Subnet Mask**: Display the camera's subnet mask address.
- **Port**: Display the camera's connection port.
- **Manufacturer**: Display the camera manufacturer's name.
- **Device Type**: Display the device type.
- **MAC Address**: Display the camera's MAC address.
- **Firmware Version**: Display the camera's firmware version.
- **Reconnect**: Select the camera you wish to reconnect and click **Reconnect** (not supported in Mars Home NVR).
- **Delete**: Select the camera you wish to remove and click **Delete** (not supported in Mars Home NVR).
- **Add All**: Click to add all available IP cameras to the system (not supported in Mars Home NVR).

NOTE:

- The **Add All** IP cameras require you to authenticate yourself. Enter your user name and password to the prompt.
- Use the **Add All** function to let the NVR detect quickly any changes made to the camera connections. For example, you disconnect the camera from LAN3 port and connect to LAN4 port and want the NVR to quickly update the camera connection information.

- **User-defined Add**: Click to add manually IP cameras (not supported in Mars Home NVR).



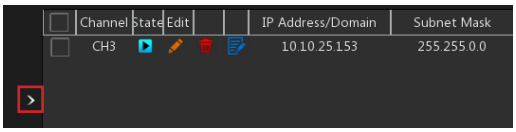
- **IP Address/Domain**: Enter the camera's IP Address/Domain.
- **Alias**: Enter an alias for the camera.
- **Position**: Specify the camera's position on the Live Viewing screen. The available options are left-top, right-top, left-bottom, right-bottom, hidden alias.
- **Port**: Enter the port for the connection.
- **Protocol**: Choose the communication port between the IP camera and the NVR. The available options are private and manufacturer-independent onvif.
- **User Name**: Enter the user name to access the IP camera.
- **Password**: Enter the password to access the IP camera.
- **Bind channel**: Choose the channel you want to bind the IP camera with.

Click **Add** to add the camera or **Search** to let the system to search for the visible IP cameras. If you have entered more IP cameras, you can select which ones you want to add and then click **Add Selected**. To delete a camera, check it first and then click **Delete**.

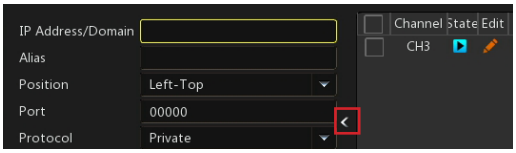
To exit the User-define Adding IP Camera screen, click **Cancel**.

NOTE:

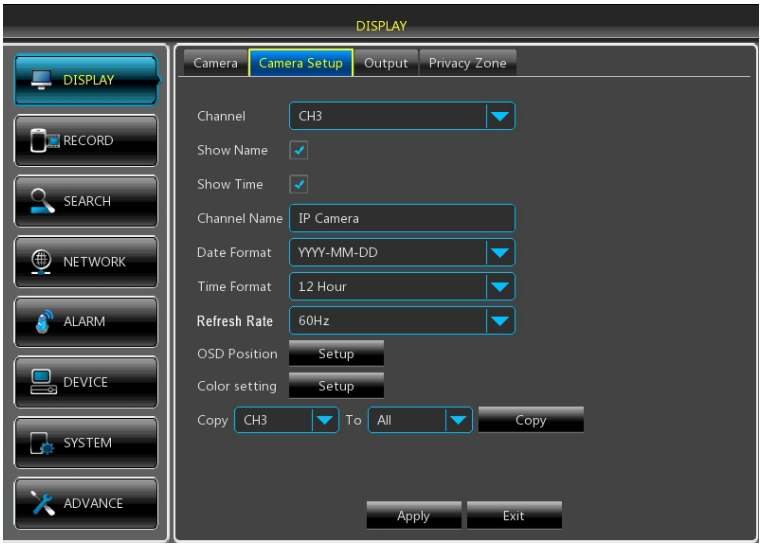
- Click < to hide the new camera parameters view.



- Click > to show the new camera parameters view.

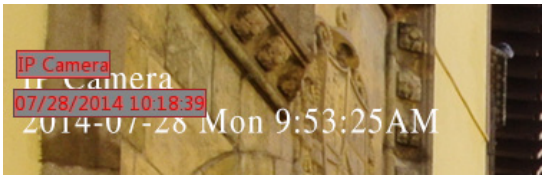


Display: Camera Setup



- **Channel**: In this menu you can configure how the channels are displayed on the Live Viewing screen. Select the channel from the drop-down menu.
- **Show Name**: Uncheck if you do not want the channel name to be displayed on the Live Viewing screen.
- **Show Time**: Uncheck if you do not want the time to be displayed on the Live Viewing screen.
- **Channel Name**: Click on the field to change the default channel name.
- **Date Format**: Choose the desired date format from the drop-down menu.
- **Time Format**: Choose the desired time format from the drop-down menu.
- **Refresh Rate:** 50Hz or 60Hz, depending on your geographical location. To change the setting, see **Flicker** in "System: General" on page 69.
- **OSD Position**: Determine where you want the channel name and current date to be displayed on the Live Viewing screen. To configure the OSD position, click **Setup**.

Click on the camera name box or date box and drag to the desired location on the channel view. Right-click to exit the Setup screen.



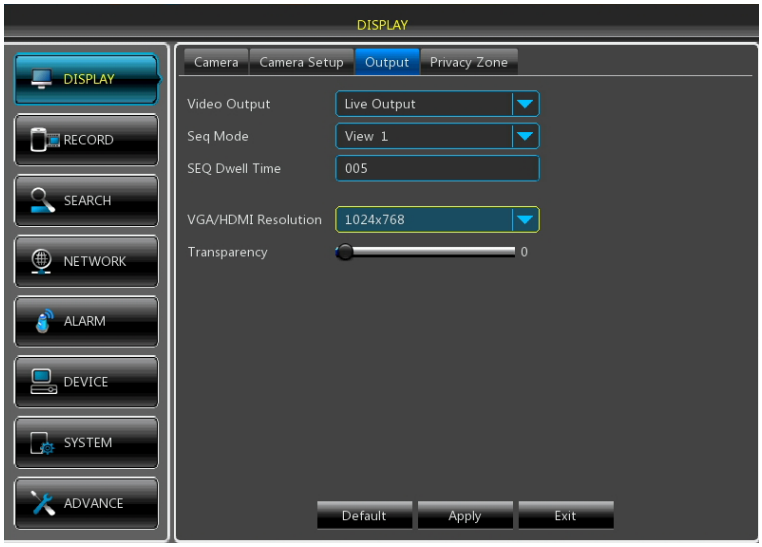
- **Color setting**: Change these values only if it is inevitable. The color changes influence your recording.

To modify the Color, click **Setup**.

Hue: Changes the color mix of the image.
Brightness (BRIGHT): Defines how bright the image appears on the display.
Contrast: Increases the difference between the darkest black and the whitest white in the image. Modify the contrast if the sections of the image "grey out".
Saturation: Alters how much color is displayed in the image. The higher the saturation, the brighter and vivid colors will appear to be. Setting this parameter too high can degrade the image quality.

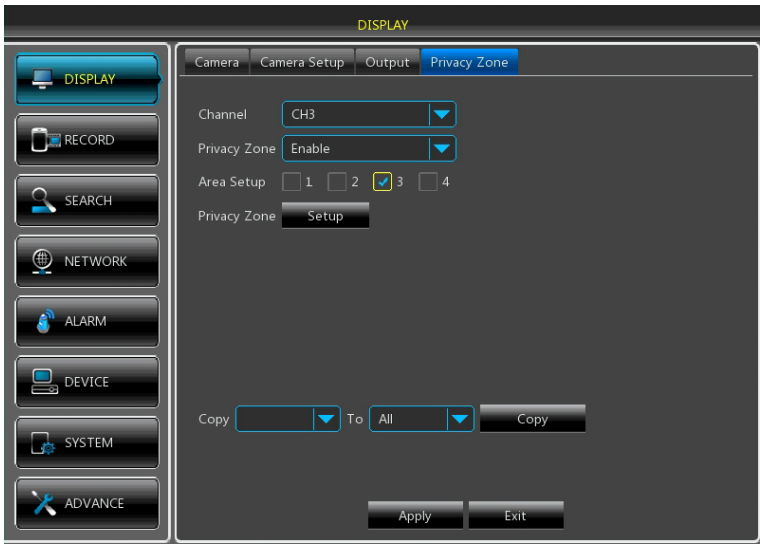
ENGLISH

Display: Output



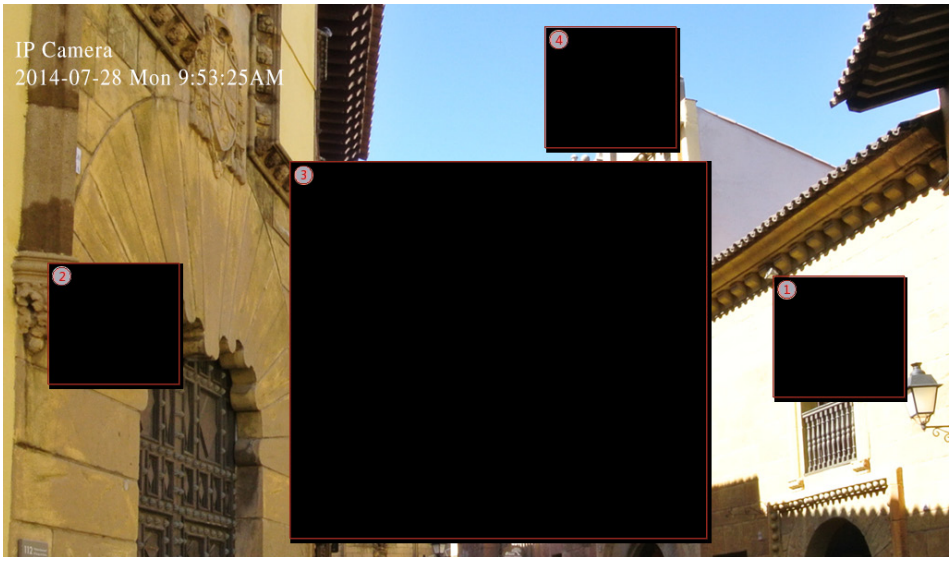
- **Video Output**: This is the video output of the main monitor that you use for live view display (not supported in Mars Home NVR).
- **Seq Mode**: One channel at a time.
- **SEQ Dwell Time:** Set how long you want the live view from a channel to be displayed in a sequence.
  For example, all four cameras (depending on the purchased model) are connected, and the set SEQ Dwell Time is 005, then press START SEQ icon ( ) (see "Pop-Up Menu on Live Viewing Screen" on page 20). The live views from cameras are displayed in 5 second interval in the sequence: Channel 1 -> Channel 2 -> Channel 3 -> Channel 4.
- **VGA/HDMI Resolution**: Select the highest resolution your monitor/TV supports. The available options the following: 1024 x 768, 1280 x 1024, 1440 x 900, 1280 x 720, and 1920 x 1080. The higher the resolution, the more details you will see on your images. The NVR will restart after you change the resolution.
- **Transparency**: Set how you want the settings menu to be displayed. To adjust the transparency, click and slide the sliderbar. The number next to the sliderbar shows the level of transparency. Depending on the live views, the higher the transparency, the more difficult it may be to read the menu items. Choose the optimal setting for your circumstances.

Display: Privacy Zone



A **Privacy Zone** can be used to cover up part of your image. You can create up to four privacy zones. On your image, they appear as “black areas”. You can choose where you want to create the zone and how large the zone is. Just click inside the default red-lined rectangle and drag it where you want to create a privacy zone. Then click and hold the red line and move the cursor to give the desired shape for the zone. Right-click to get back to the **Privacy Zone** menu items.

Four Privacy Zones



- **Channel:** Select the channel from the drop-down menu where you want to create privacy zone(s).
- **Privacy Zone**: You need to enable the function in order to use it.
- **Area Setup**: Decide how many privacy areas you want to set and check the respective checkbox. The maximum number of areas is 4. If you want to define four privacy areas, check all checkboxes.

- **Privacy Zone**: Click **Setup** to open the channel in full screen mode and start marking the privacy zones. Depending on the number of areas you have chosen in **Area Setup,** you will see areas covered with red-lined rectangles on the channel view. When you have finished marking the areas, right-click to return to the Main Menu. On the channel view you will see the “black areas”.

  NOTE:
  - The privacy zone(s) are not visible on channel live view as well as on the video file. On live view and video file, you can see the privacy zone(s) covered with black boxes.
  - The privacy zone is valid only to the specific channel. If you wish to copy the same settings to other channels, use **Copy** function.

Record: REC Para

In REC Para menu you can enable or disable the recording per channel and set the pre-recording condition.

- **Channel**: Select the channel to set its recording parameters.
- **Record**: If **Record** is enabled, the video from the selected channel is recorded to the HDD.
- **Stream Mode**: Choose the recording resolution. The available options are **Mainstreram** (HD resolution) and **Substream** (VGA resolution). To configure the stream parameters, please see "Network: MainStream" on page 56 and "Network: SubStream" on page 56.
- **PreRecord**: You can set the recording only when an event is triggered. With this feature the NVR starts the recording even before the event occurs, to avoid missing important details.

Record: Schedule

Normal recording / motion triggered recording only takes place according to the set schedule. If it is not set correctly, the consequences may be lead to losing important video coverage. After you set the schedule, please make sure you enable recording for the channel in **REC Para** menu. See "Record: REC Para" on page 46.

The recording schedule lets you to set up a schedule daily and hourly by normal (continuous) recording and motion recording.

By default, the record mode for all connected channels is set to **Normal**. It means the NVR will continuously record 24 hours a day to ensure that you will not miss any important happenings. However, the disadvantage is that the HDD space will become full very fast.

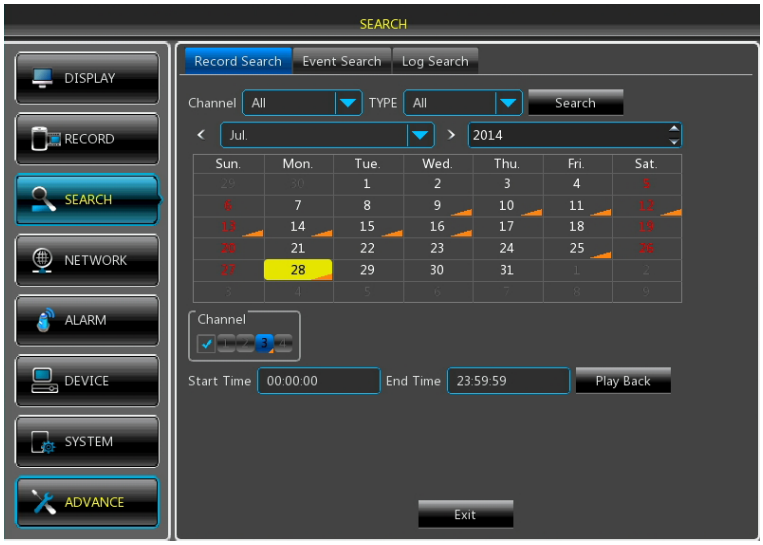
- **Channel**: Select the channel where you want to apply the schedule.
- **Normal Recording**: When the time slot is marked blue, it means the channel performs normal recording for that time slot. If you do not want to record all 24 hours in a specified day, click on the blue slot to deselect. The slot turns gray which means no recording for that time period.
- **Motion Recording**: When the time slot is marked green, it means the channel records only when a motion is detected during that time slot.
  We recommend to use this type of recording. The motion recording means that the recording is triggered only if a movement is detected.
  To use the motion detection, you must enable and configure the motion settings for the channel in Alarm menu. See "Alarm: Motion" on page 61.

  If you want to change the motion recording schedule in a specified day, click on the green slot to deselect. The slot turns gray which means no motion recording for that time period.

  NOTE: A time slot marked gray means that there is no recording scheduled for the time slot.

ENGLISH

Search: Record Search



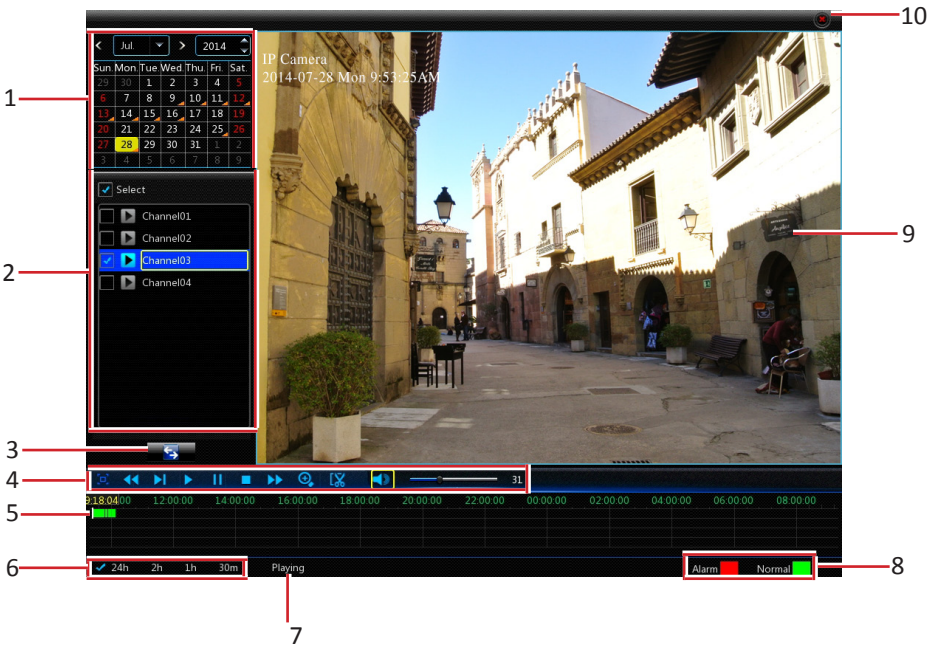
In Record Search menu you can search and playback the recorded videos based on recording type (alarm / normal), channel, date and time parameter.

- **Channel**: Choose a channel to playback the recording or keep the default **All.** "All" means searching for the recording on all the channels for the specified date and time.
- **Type**: Select the recording type. The available options are all types, normal, or alarm recording.
- **Search Date**: Specify the month and year where you want to search the recorded videos. Click **Search** to look for the recordings on that date. The result is displayed in the calendar.
- **Start Time/End Time:** Click on the day in the calendar and specify the beginning time and end time of the footage you want to review in playback. Then click **Play Back**. The Playback screen opens.

NOTE:

- The days that are marked with a small orange triangle indicate the days when a recording took place.
- The channels that have recordings on a specific day are displayed in the channel view. Uncheck the channels you do not wish to see in playback.

Playback Screen

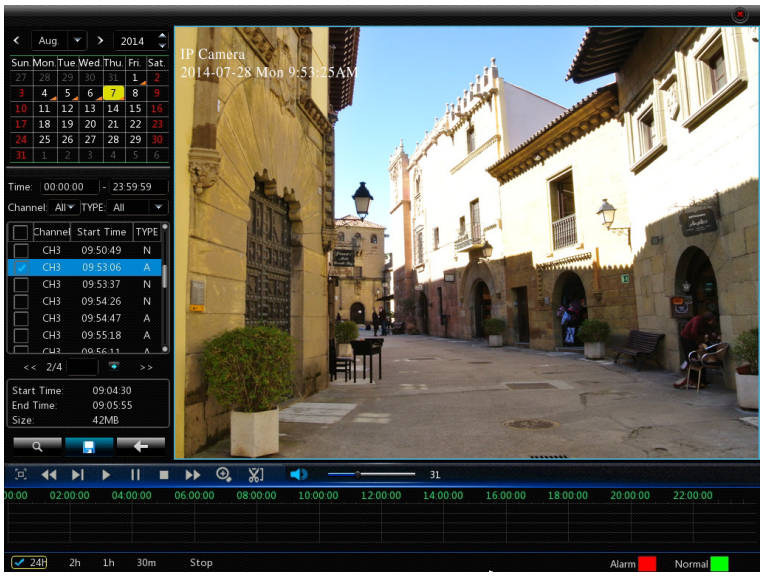


No.	Item	Description
1	**Set Date**	• Modify the month and year of the playback if necessary. • Select the day.
2	**Channels**	Select the channel.
3	**Switch**	Click to switch into backup mode. Please refer to "Backing Up Videos" on page 50.
4	**Playback Control**	During playback, click any of the following: • : View the recording in full screen. • : Click repeatedly to rewind in the speed x2/x4/x8/x16. • : Click repeatedly to slow forward in the speed x1/2; x1/4; x1/8; x1/16. • : Play the recording in normal speed. • : Pause the playback. • : Stop the playback. • : Click repeatedly to fast forward in the speed x2/x4/x8/x16. • : To zoom in. • / : To trim a video. Please refer to "Trimming Videos" on page 51. • : Turn off or turn on the audio. **NOTE**: The audio function is available only with the ICB-100 camera. • 50: Adjust the playback volume.
5	**Time Bar**	Playback time bar.
6	**Time Frame**	Select the time frame for the playback. The available options are 24h/2h/1h/30m.
7	**Status Bar**	Display the playback-related activities. For example, play, stop, >> x2, etc.
8	**Recording Indicator**	The normal recordings appear in green color and alarm recordings in red color.
9	**Video Display**	Here is displayed the selected footage.
10	**Exit**	Click to exit the Playback screen.

ENGLISH

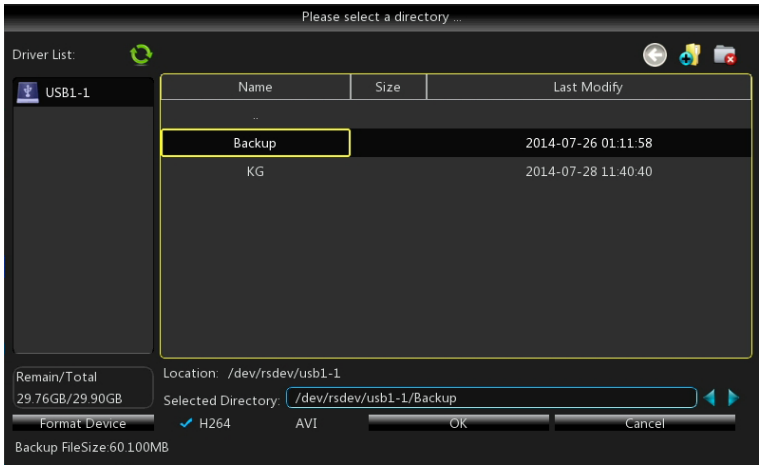
Backing Up Videos

To save the recording(s) to a USB storage device, on Playback screen click to view all the recordings of a specific day as a list for backing up purposes.



Set the date and time to search for the recordings. Click on the specific day and then click . The recordings of that day will be displayed as a list. Double-click on the recording for playback. If you do not want to review and want to start the backup procedure immediately, select the recording(s) and click directly on icon. The Backup screen ("**Please select a directory ...**") opens.

NOTE: Ensure you have connected a USB storage device to the NVR.



Click on the storage device on the left column and select a directory on the storage device for saving the recording. Then select the video format (**H.264** or **AVI**) and click **OK**. Wait until you see "**Backup successful!**" message on the screen.

IMPORTANT: Do not remove the USB storage device while file transferring is in progress.

NOTE:

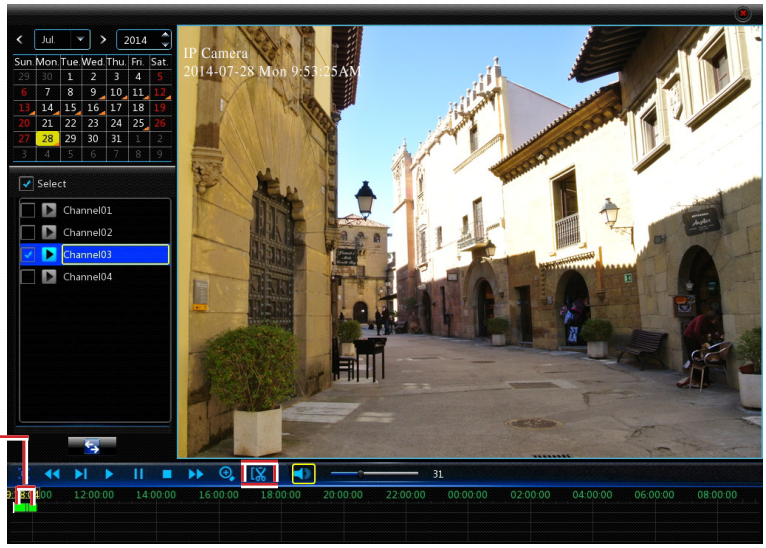
- If you choose H.264 format, in order to play the backed up video on your PC, you need to install a video player from the supplied CD.
- If you choose AVI format, you can use any video player to play the backed up video on your PC.
- If you need to format the USB storage device, click **Format**.
- On Backup screen, click to move up one directory, click to create a new directory, or click to delete a directory.

Trimming Videos

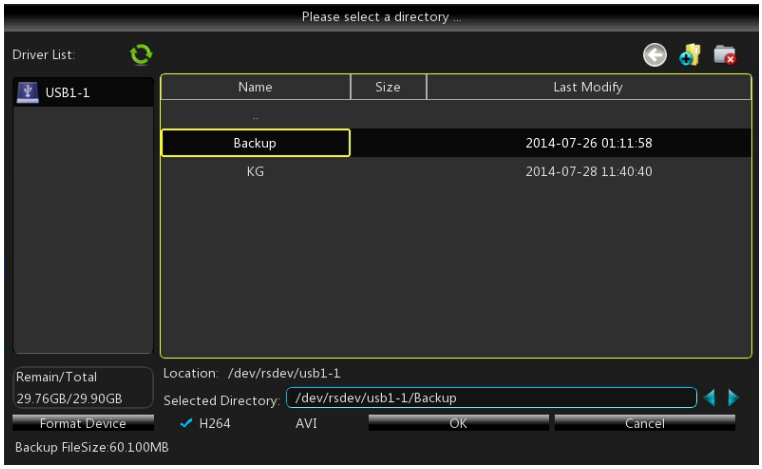
Use this function if you want to backup a section of the video for safekeeping or for evidentiary purposes. You need to connect a USB storage device into the USB port on the NVR, search and playback the footage. Double-click to view the channel in full screen and while playing the video, click the . To stop trimming, click the .

NOTE: Trimming video does not alter video saved on your NVR's HDD. It only determines the duration of a video being exported to the external storage device.

Example selection for trimming



After you stop trimming, the Backup screen ("**Please select a directory ...**") opens. Choose a directory where you want to save the footage.



Click on the storage device on the left column and select a directory on the storage device for saving the recording. Then select the video format (**H.264** or **AVI**) and click **OK**. Wait until you see "**Backup successful!**" message on the screen.

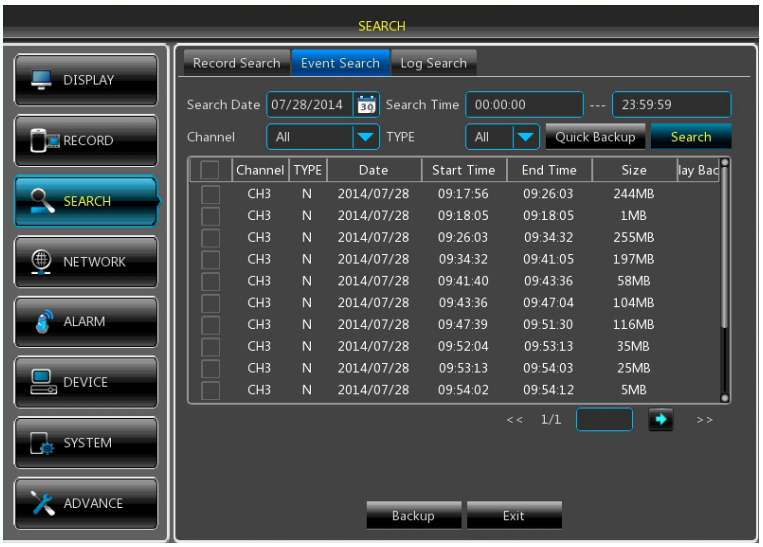
IMPORTANT: Do not remove the USB device while file transferring is in progress.

NOTE:

- If you choose H.264 format, in order to play the backed up video on your PC, you need to install a video player from the supplied CD.
- If you choose AVI format, you can use any video player to play the backed up video on your PC.
- If you need to format the USB storage device, click **Format**.
- On Backup screen, click to move up one directory, click to create a new directory, or click to delete a directory.

ENGLISH

Search: Event Search

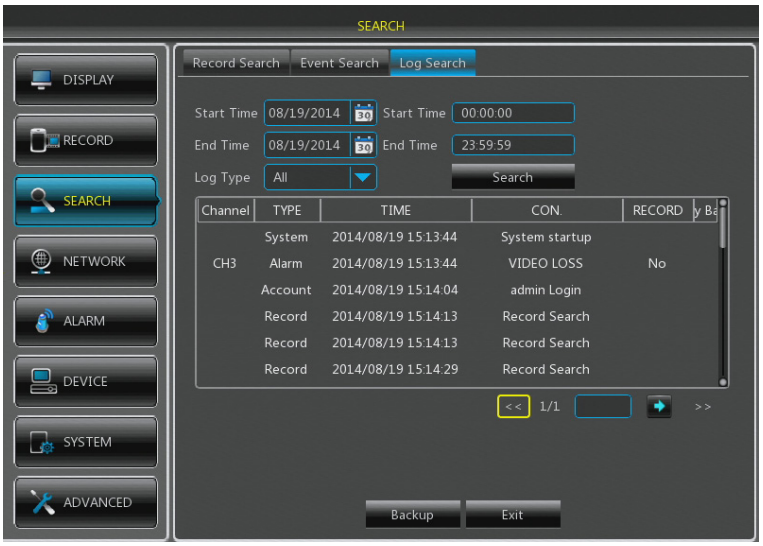


The Event Search menu displays you the recordings that were triggered by the NVR. For example, if you use the default continuous recording, then likely most of the "events" are normal-type recordings.

- **Search Date:** Click to specify the date for search the event.
- **Search Time**: Click to specify the starting time and the ending time to search for the event.
- **Channel**: Select the channel to search, or select **All** to search all channels.
- **Type**: Select the type of recording to search among **All**, **Norma**l or **Alarm** and click **Search**. The recordings will be listed on the table. You can backup the event(s) or playback the event(s). To backup the entire event, click **Quick Backup**. To backup an individual event, choose the event first and then click **Backup**. A Backup screen opens. Please see more details in "Backing Up Videos" on page 50. To playback event(s), double-click on the event. The Playback screen opens. Please see more details in "Playback Screen" on page 49.

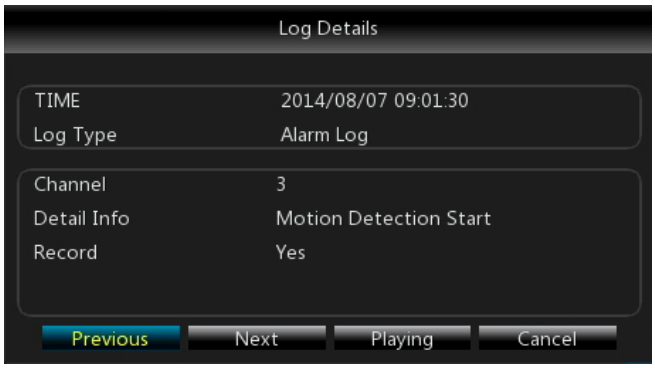
Search: Log Search

The **Log** menu displays a list of events, presented in chronological order: the most recent events will be at the end of the list. The **Log** will list all events that the NVR monitored.

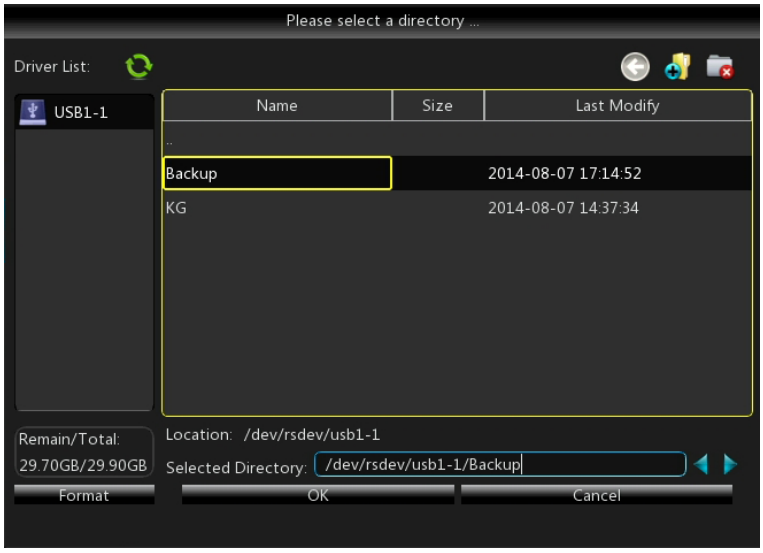


- **Start Time/End Time**: Specify the start and end date/time of the logs you want to review and/or save on an external USB storage device. Click **Search**. The logs will be listed on the table.
- **Log Type**: Select the log type among **All**, **System**, **Config**, **Alarm**, **Account**, **Record** or **Storage**.

NOTE: Double-click on the log to view the details, the previous log, next log, or to playback the alarm logs. More information on playback, please refer to "Playback Screen" on page 49.



NOTE: To backup the logs, click **Backup**. The Backup screen opens.



Click on the storage device on the left column and select a directory on the storage device for saving the logs. Click **OK** and wait until you see "**Backup successful!**" message on the screen.

IMPORTANT: Do not remove the USB storage device while file transferring is in progress.

NOTE:

- If you need to format the USB storage device, click **Format**.
- On Backup screen, click to move back in a directory, click to create a new directory, or click to delete a directory.

ENGLISH

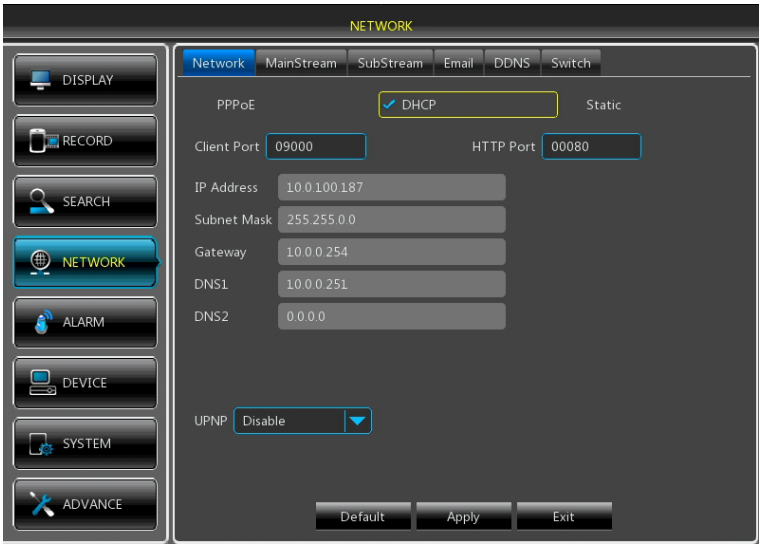
Network: Network

If you want to use your smart phone/tablet/PC for remote monitoring, upload photos/videos to Dropbox/Google Drive, send e-mail, etc., please complete the network settings.

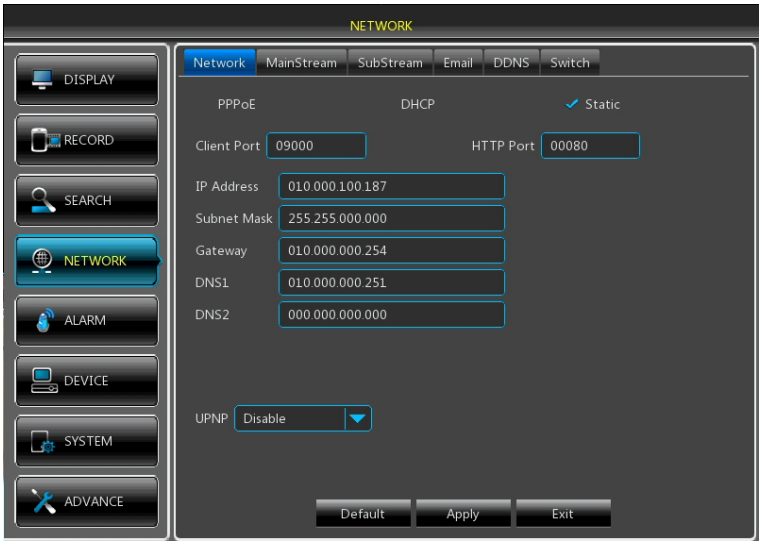
The most common types are **DHCP** or **Static**. Most probably your network type is **DHCP**, unless the network is *manually* addressed (usually called- **Static**). If you need an authentication user name and password to the Internet, then choose **PPPoE**.

NOTE: If you are not sure in your network type, please contact your ISP (Internet Service Provider).

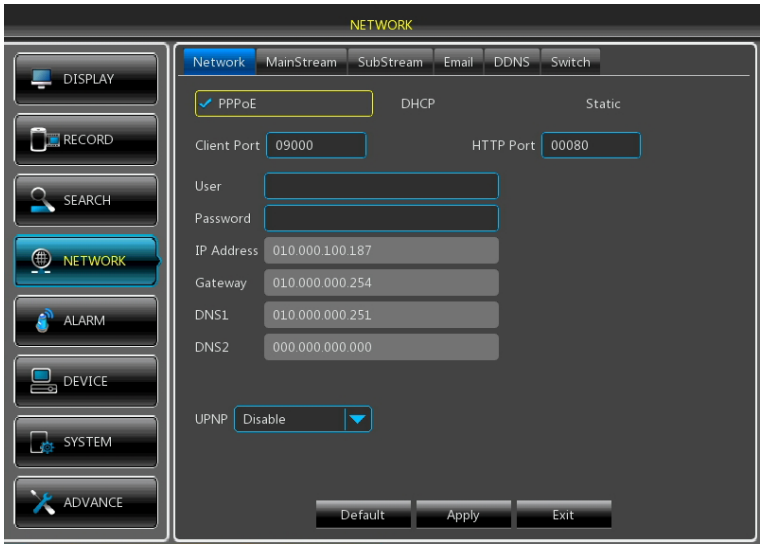
DHCP Connection



Static Connection



PPPoE Connection



- **Type**: Select the network type you are using.

  DHCP Type: If you choose this type, then the network settings will be filled automatically.

  Static Type: To fill in all the required network settings, please ask your ISP (Internet Service Provider).

  PPPoE Type: To fill in all the required network settings, please ask your ISP (Internet Service Provider).

  NOTE: If you are not sure in the network connection type or in network settings, always ask your ISP.
- **Client Port**: Is the port that the NVR will use to send information through. It is important to configure if you want to use the UPnP feature (when your router supports UPnP, then you don't need to manually forward ports from the router to your NVR). The port must be unique. When you use the default port 9000, and it is already taken by other devices or applications, please change the port and remember it because you need to use it when logging in remotely to the NVR (Web Client). This setting is for advanced users.
- **HTTP Port:** Is the port that you will use to log in to the NVR (for example, using Web Client). The port must be unique. When you use the default port 80, and it is already taken by other applications, please change the port, for example, 85. In this case, you need to add the port number after the IP address. For example, if you use Static IP address, you need to enter the IP address as "010.000.100.187:85" in the URL box when logging in Web Client.
- **IP Address**: The IP address identifies the NVR in the network. The IP address consists of four groups of numbers between 0 to 255, separated by periods. For example, "010.000.100.187". If your network type is **Static**, and you are not sure what the IP address is, please ask your ISP.
- **Subnet Mask**: Subnet mask defines a range of IP addresses that can be used in a network. If IP address is like a street where you live then subnet mask is like a neighborhood. The subnet address consists of four groups of numbers, separated by periods. For example, "255.255.000.000". If your network type is **Static** and you are not sure what the subnet mask address is, please ask your ISP.
- **Gateway**: This address allows the NVR to access the Internet. The format of the **Gateway** address is the same as the **IP Address** has. For example, "010.000.000.254". If your network type is **Static** and you are not sure what the Gateway is, please ask your ISP.
- **DNS1/DNS2**: DNS stands for Domain Name System where **DNS1** is the main DNS server and **DNS2** is the backup server if the **DNS1** is not accessible. DNS server settings must be properly configured if you want to use the E-mail notification, NTP or DDNS, etc. If you are not sure, what your DNS address is, please ask your ISP.
- **UPNP**: If you want to access the Web Client remotely, you need to complete the port forwarding. Enable this option if your router supports the UPnP. You need to enable UPnP both, on NVR and router. In this case you do not need to configure manually port forwarding on your router.

  NOTE: If your router does not support UPnP, then make sure the port forwarding is completed manually. Please see the customized free guide on *http://portforward.com/kguard*.

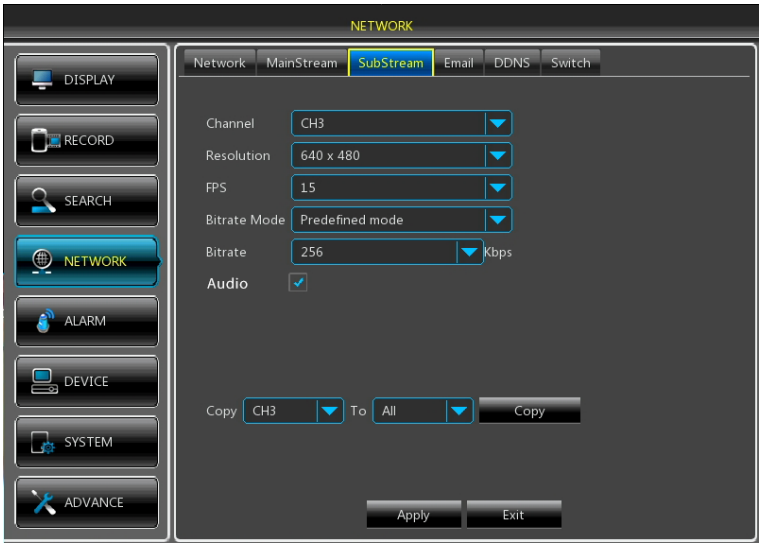
Network: MainStream

In this menu you can configure the parameters of the mainstream. These parameters define the recording resolution of the NVR.

- **Channel**: Choose the channel where the settings are applied.
- **Resolution**: Choose the recording resolution. The available options are 1280 x 720 or 1280 x 960.
- **FPS**: Select how many images per second the NVR will record. The highest is 30 FPS (60Hz) or 25 FPS (50Hz).
- **Bitrate Mode**: If you want to set the bitrate by yourself, then choose user-defined mode. If you want to select the predefined bitrate, choose predefined mode.
- **Bitrate**: The higher the bitrate, the better the video quality and the larger the file size on the disk.
- **Audio**: Check the box to enable audio for a channel.
  NOTE: The audio function is only supported with the ICB-100 camera.

Network: SubStream

In this menu you can configure the parameters of the substream. These parameters define how the images will be visible over the Internet via PC (for example, **Web Client**). By default it has much lower quality than the mainstream.



- **Channel**: Choose the channel where the settings are applied.
- **Resolution**: The default screen resolution (640 x 480).
- **FPS**: Select how many image per second are transferred when viewing the channel remotely. The highest is 30 FPS (60Hz) or 25 FPS (50Hz).

- **Bitrate Mode**: If you want to set the bitrate by yourself, then choose user-defined mode. If you want to select the predefined bitrate, choose predefined mode.
- **Bitrate**: The higher the bitrate, the better the video quality and the larger the file size on the disk.
- **Audio**: Check the box to enable audio for a channel.
  NOTE: The audio function is only supported with the ICB-100 camera.

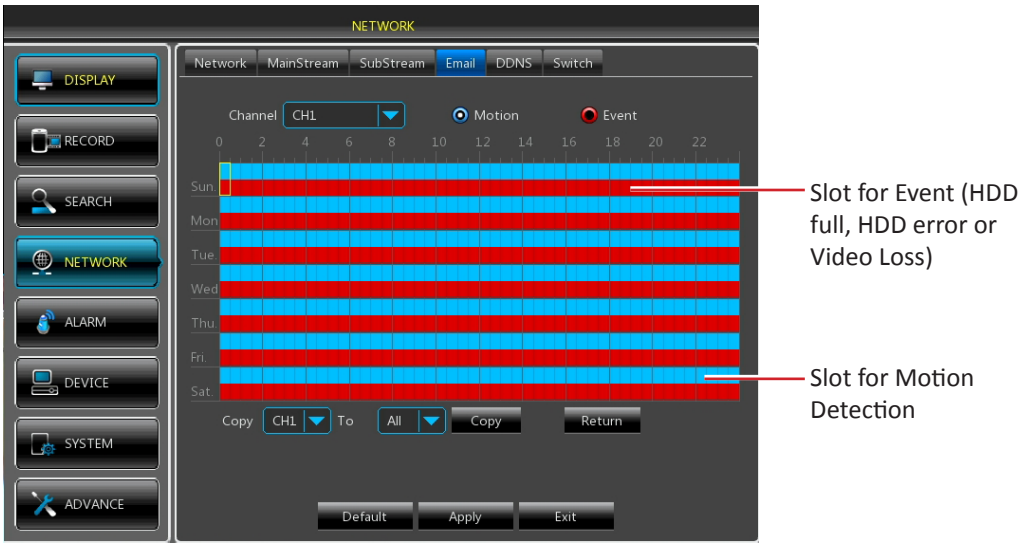
Network: Email

Please complete the Email settings if you want to receive a notification e-mail when a motion is detected, HDD becomes full, HDD is in error state, or Video Loss occurs.

- **Email**: You need to enable the e-mail function, to allow the NVR to send you notification e-mails when an event occurs.
- **SSL:** Enable if your e-mail server requires the SSL verification. If you are not sure, please consult your e-mail service provider. For example, if you are using Gmail then this option should be enabled.
- **SMTP Port:** Enter the SMTP port of your e-mail server. For example, if you are using Gmail, the SMTP port is 465.
- **SMTP Server**: Enter the SMTP server address of your e-mail.
- **Sender**: Enter your e-mail address.
- **Sender Password**: Enter the password of your e-mail.
- **Receiver**: Enter the e-mail address where you want to receive the event notifications from the NVR.
- **Interval**: Configure the length of the time interval between the notification e-mails from NVR. Please be noted that if you set the interval, for example 3 minutes, have not configured the e-mail event **Email Schedule**, and your mailbox has a size limit, then your mailbox may become full very fast. In this case you may miss the new notifications from the NVR. To test the e-mail settings, click **Test**.

- **Email Schedule**: For your convenience, you can define a schedule when and what type of events you want to be notified. To set up a schedule, click **Email Schedule**.

Email Schedule



- **Channel**: Select the channel where you want to apply the e-mail schedule.
- **Motion-Based Notification**: When the time slot is marked blue, it means the system will send an e-mail when a motion is detected during that time slot.
  To use the motion detection, you must enable and configure the motion settings for the channel in Alarm menu. See "Alarm: Motion" on page 61.
  If do not want to receive an e-mail from the system when a motion is detected, click on the blue slot to deselect. The time slot turns gray which means the system will not send any e-mails when a motion is detected during that time period.
- **Event-Based Notifications**: When the time slot is marked red, it means the system will send an e-mail when an event is registered during that time slot. For example the HDD is full.
  If do not want to receive an e-mail from the system when an event is registered, click on the red slot to deselect. The time slot turns gray which means the system will not send any e-mails when an event is registered during that time period.

NOTE: Click **Return** to return to the e-mail configuration screen.

Network: DDNS

The reason why you may need to configure DDNS settings is when your NVR is connected to a network where the IP address is assigned by the DHCP server (see "Network:DHCP." on page 55). In this case, every time you start up the NVR, the IP address will change. A dynamic IP address is a problem when you want to connect remotely to the NVR via PC (see "Remote Access Via Web Client" on page 77). As a solution, you can use the DDNS (Dynamic DNS) service. The DDNS provides a static address to simplify remote connection to your NVR.
To use the DDNS, you first need to open an account on the DDNS service provider's web page. For example, KGUARD.ORG: *http://www.kguard.org*.

- **DDNS**: Enable the DDNS service.
- **Server**: Select the preferred DDNS server. The available options are **KGUARD.ORG (recommended), DDNS_3322, DYNDNS, CHANGEIP, DNSEXIT.**
  NOTE: If you do not have a DDNS account yet, you need to create one on the DDNS service provider's web page.
- **Domain**: Enter the domain name you created on the DDNS service provider's web page. For example, myNVR4.kguard.org. This will be the address you type in the URL box when you want to connect remotely to the NVR via PC.
- **User/Password**: Enter the user name and password you obtained when creating an account on the DDNS service provider's web page. For example, username for KGUARD.ORG users is the e-mail address you used when creating the account on KGUARD.ORG web page.

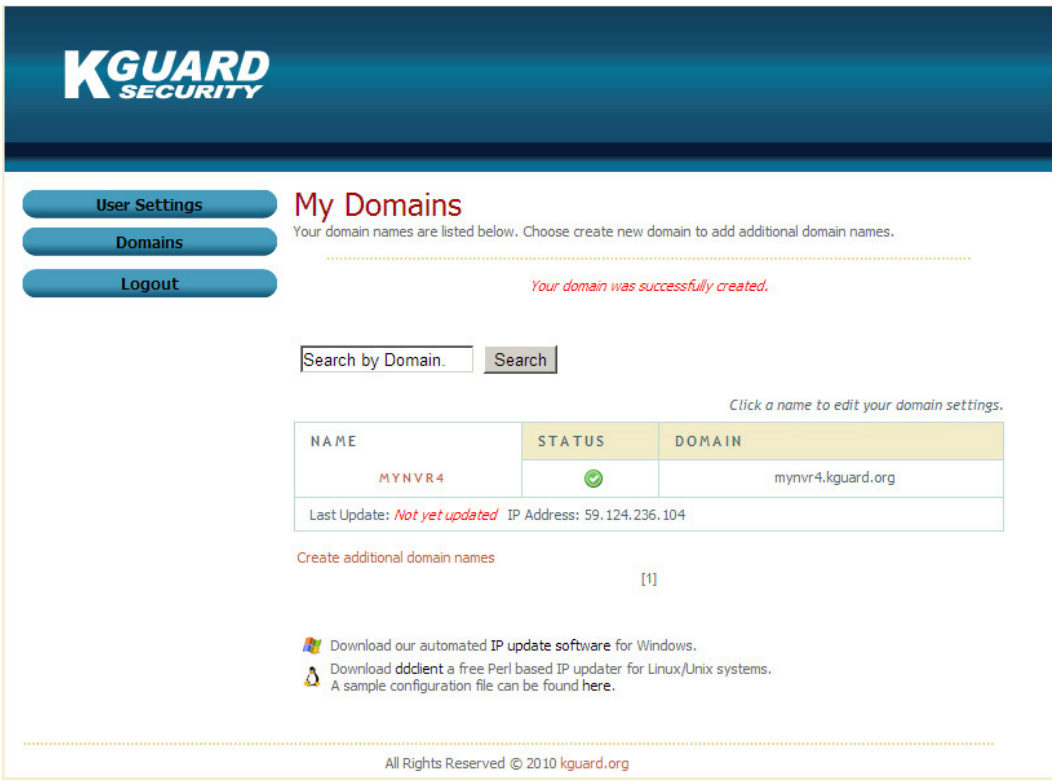
NOTE:

- Please make sure you have completed the configuration of the NVR's network settings.
- Click **Test** to test the DDNS settings. For applying the domain name on KGUARD.ORG (*http://www.kguard.org*), do the following:

Then provide a domain name for your NVR. For example, "MyNVR4".

KGUARD SECURITY
User Settings
Domains
Logout
Domain Name Creation
Enter a new domain name below.
You must create a domain name to continue.
Domain name must start with (a-z, 0-9). Cannot end or start, but may contain a hyphen and is not case-sensitive.
MyNVR4
kguard.org
Request Domain
All Rights Reserved © 2010 kguard.org

If the domain name registration is successful, the following screen displays the domain name and its status.


KGUARD SECURITY
User Settings
Domains
Logout
My Domains
Your domain names are listed below. Choose create new domain to add additional domain names.
Your domain was successfully created.
Search by Domain.
Search
Click a name to edit your domain settings.
NAME
STATUS
DOMAIN
MYNVR4
mynvr4.kguard.org
Last Update: Not yet updated IP Address: 59.124.236.104
Create additional domain names
[1]
Download our automated IP update software for Windows.
Download ddclient a free Perl based IP updater for Linux/Unix systems.
A sample configuration file can be found here.
All Rights Reserved © 2010 kguard.org

NOTE: After you register the domain name and complete the DDNS settings on NVR, then you can identify the NVR on the network through its domain name. For example, you assign the NVR a domain name myNVR4.kguard.org and want to access the NVR remotely, using the **Web Client**. You need to open the web browser on your PC and instead of typing in the URL field the IP address of the NVR, you can just type myNVR4.kguard.org, press **Enter** and the login page of the NVR opens. Please make sure you have completed the Port Forwarding and configuration of the NVR's network settings, see "Network: Network" on page 54.

Network: Switch (Not Supported in Mars Home NVR)

If a network conflict occurs with an IP camera, you need to configure the network switch settings.

- **IP Address**: Enter an IP address to the network camera.
- **Subnet Mask**: Enter a subnet mask for the network camera connection.
- **Gateway**: Enter a gateway for the network camera connection.
- **Switch Mode**: Choose the switch mode. If you want to switch automatically to the network switch mode, select **Auto Mode**. If you prefer to switch manually to the network switch mode, select **Manual Mode**.

Alarm: Motion

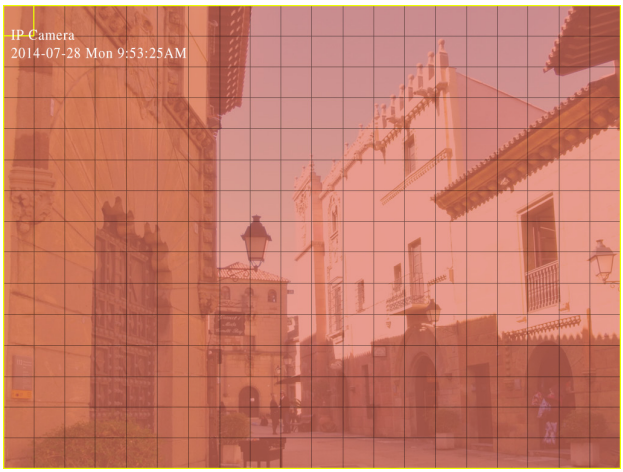
About Motion Detection

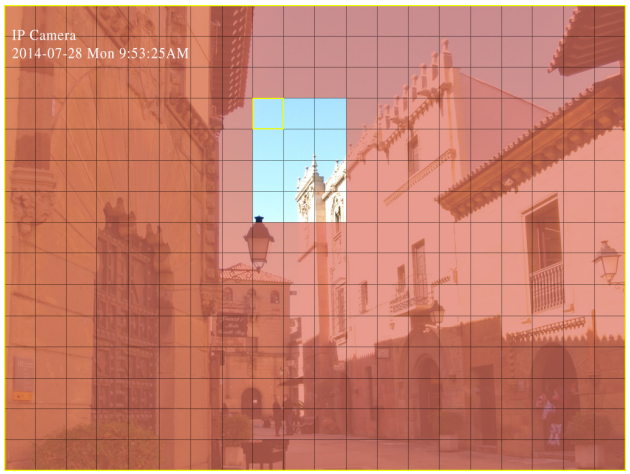
The NVR detects the motion by comparing one frame to another. A sufficient amount of difference is interpreted as motion. As a result, the NVR is able to detect when there is a change in the picture and to initiate the recording.

Set Motion Detection Area

By default, the whole screen is marked for motion detection (red block).If you want to disable motion detection on an area, you need to click the grid cursor and then drag the mouse to highlight the scope to unmark the area (transparent block) for motion detection.

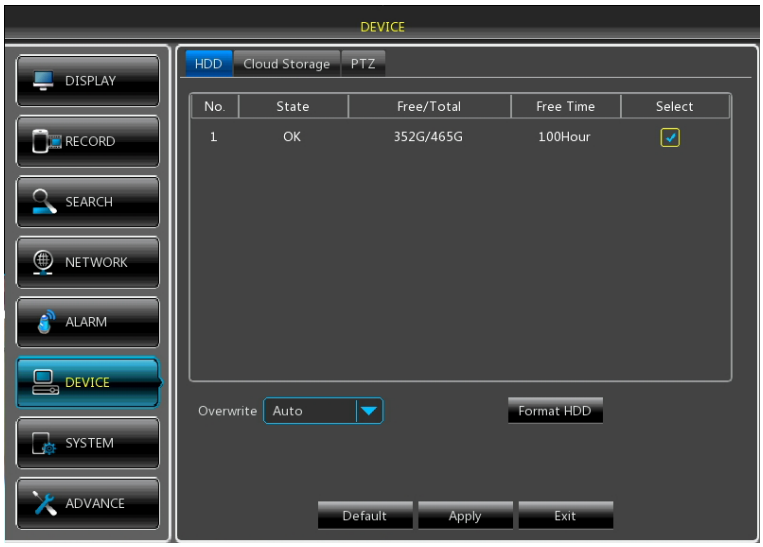
Setting Motion Area





- **Channel**: Select the channel you want to set the motion detection.
- **Enable:** Enable the motion detection for a channel.
- **Sensitivity**: It is very important to set the motion detection on a suitable sensitivity level. To find the best sensitivity level, test the feature. For example, see how the motion event is triggered in normal and low light conditions (during day time and night). If you set the motion detection at a high sensitivity levels ("8" is the most sensitive) then the frequency of false alarm events increase. Vice versa if the sensitivity level is too low ("1" is the least sensitive), you might increase the risk that a significant motion event will not trigger the motion detection to record.
- **Area**: Click **Setup**, to define the motion area. See above.
- **Buzzer**: The NVR can use its internal buzzer to emit an alarm tone. By default this feature is **Disabled** but if you want, you can set the buzzer duration in seconds when the motion is detected.
- **Post Recording**: You can set how long after an event occurs that the NVR will continue to record. The recommended recording length is 30 seconds but it can be set higher up to 5 minutes.
- **Show Message**: Check the box to display "M" icon on the screen when the motion is detected.
- **Send Email**: You can let the NVR to send you an auto-e-mail when the motion is detected. To set up the e-mail schedule, see "Network: Email" on page 57.
- **Full Screen**: If this function is enabled and the motion is detected, the corresponding channel will be displayed in full screen.
- **Record Channel**: You can check the box to enable recording and then select the channels to record when the motion is detected.

Device: HDD

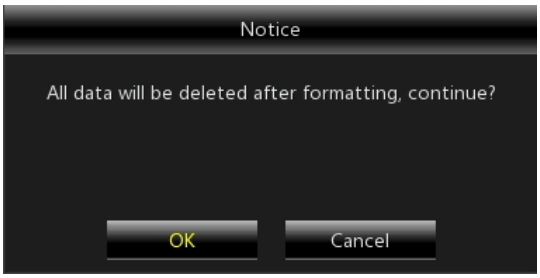


In this menu you can view and configure the internal HDD, that the NVR uses for saving the reocrdings. You will see the state, free/total space and free recording time information concerning the HDD.

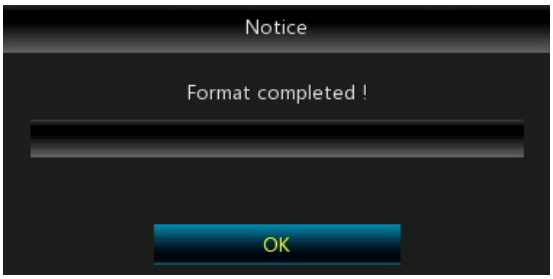
If you start up the NVR for the first time, you need to format the HDD.

NOTE: Make sure you are not formatting an HDD that has already data on it, unless you want to delete the previous data.

- **Format HDD**: First you need to select the HDD for formatting. Check the **Select** check-box. A warning message appears on screen, asking your confirmation to delete all data on the disk after formatting. Click **OK**.



Wait until the HDD is formatted. For example, formatting a 500GB HDD will take about 1-2 minutes. When the formatting is complete, a notification appears on the screen. Click **OK**.



- **Overwrite**: Use this option to overwrite the old recordings on the HDD when the HDD is full. For example, if you choose the option 7 days then only the last 7 days recordings are kept on the HDD. To prevent overwriting any old recordings, select **Disable**. If you have disabled this function, please check the HDD status regularly, to make sure the HDD is not full.

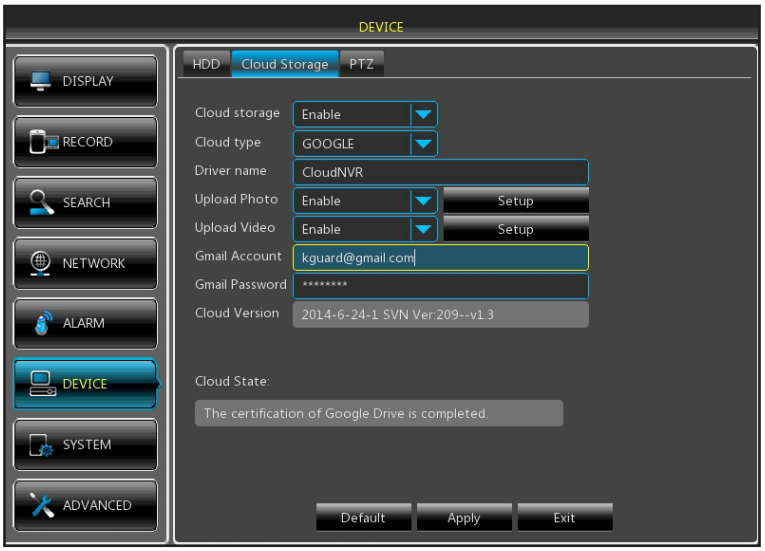
ENGLISH

Device: Cloud Storage

This feature allows users to see what is happening on your camera site anytime, anywhere through the Internet. Uploading the snapshots can be based on a time interval or a motion is detected. Uploading the videos takes place only when a motion is detected during the set schedule. The NVR supports Google Drive and Dropbox cloud services.

See more about configuring the cloud storage in "Using Cloud Storage" on page 32.

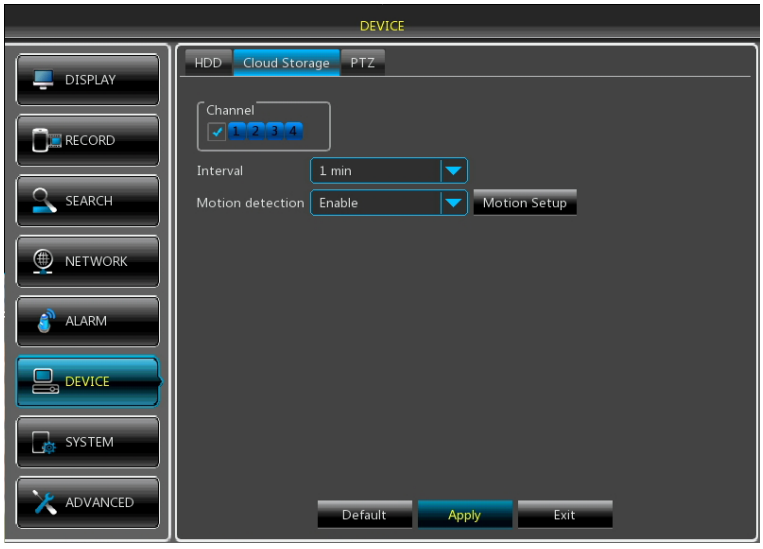
Google Drive



- **Cloud Storage:** Allow cloud settings.
- **Cloud Type:** Select **Google Drive** from the list.
- **Driver Name:** Enter the cloud storage name for your NVR. When linking the KGuard Cloud Uploader to your Google Drive, the **Driver Name** will be used as the folder name where KGuard uploads the snapshots and/or videos.
- **Gmail Account**: Enter your Gmail account in the format <*username*>*@gmail.com*. For example, kguard@gmail.com.
- **Gmail Password**: Enter the password of your Gmail account.
- **Cloud Version**: Current cloud storage service version.
- **Cloud State**: View the connection status to the virtual drive.

Click **Apply** to save the settings. Then continue configuring the photo/video upload settings.

- **Upload Photo:** Enable and click **Setup** if you want to upload photos from the cameras.



Channel: Select the channels where you want to upload the photos to Google Drive.

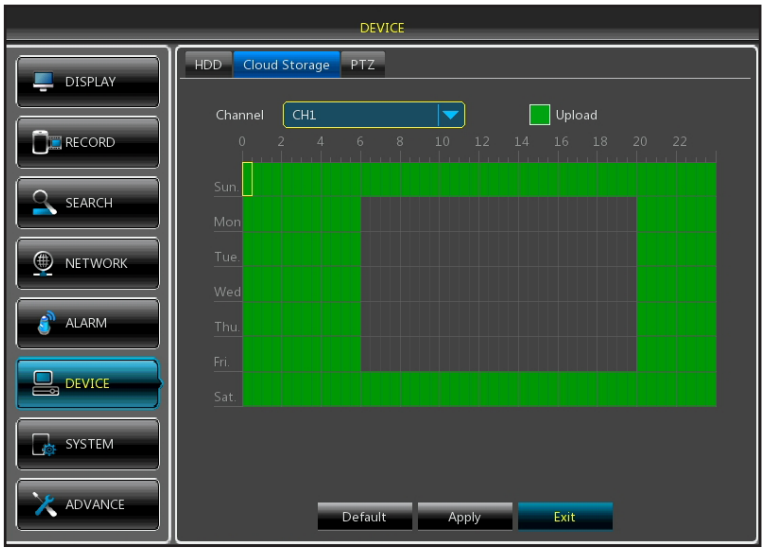
Interval: Set the photo uploading interval.

Motion Detection: Enable if you want to upload photos to Google Drive when the camera detects a motion. Click **Motion Setup** if you have not yet set the motion area. Please see "Alarm: Motion" on page 61.

NOTE: Photos will be uploaded only on a set time interval or if a motion is detected.

Click **Apply** to save the settings for **Upload Photos**.

- **Upload Video:** Enable and click **Setup** if you want to upload videos from the cameras when a motion is detected.



Channel: Select the channel where you want to upload the videos to Google Drive. When the day/time slot is marked green, it means the videos are uploaded to Google Drive when a motion is detected during the specified day/hour.

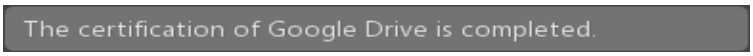
NOTE:

- You can only choose one channel where to upload videos.
- In one hour the system uploads maximum 3 footages.
- The maximum duration of each uploaded footage is 10 seconds.

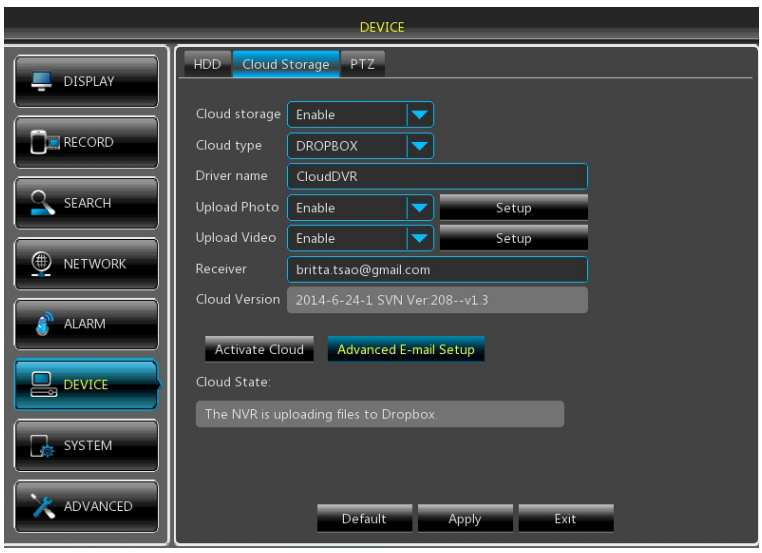
Click **Apply** to save the settings for **Upload Video**.

After all settings are completed, click **Apply** in **Cloud Storage** menu.

TIP: See the connection status below the screen. For example, a notification of a successful connection:



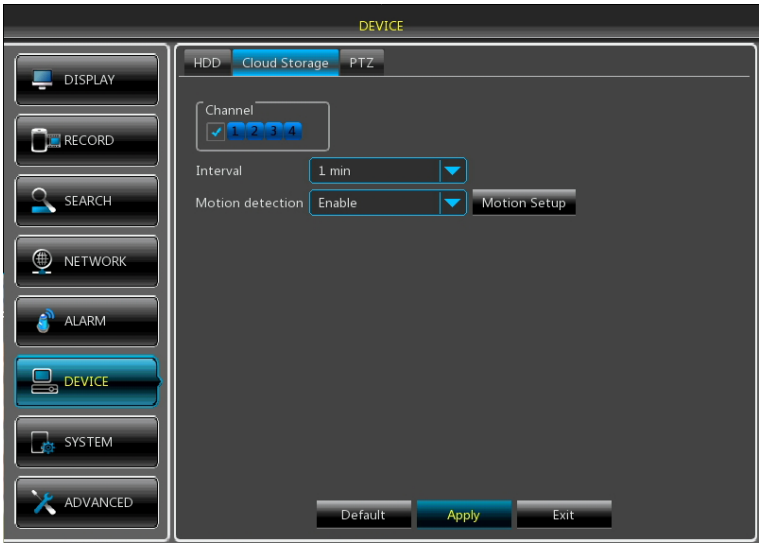
Dropbox



- **Cloud Storage:** Allow cloud settings.
- **Cloud Type:** Select **Dropbox** from the list.
- **Driver Name:** Enter the cloud storage name for your NVR. When linking the KGuard Cloud Uploader to your Dropbox, the **Drive Name** will be used as the folder name where KGuard uploads the snapshots and/or videos.
- **Receiver:** Enter your e-mail address that is associated with your Dropbox account. The NVR will be sending the activation e-mail to this e-mail address for asking your acceptance to link the NVR to the Dropbox.
- **Cloud Version**: Current cloud storage service version.
- **Cloud State**: View the connection status to the virtual drive.

Click **Apply** to save the settings. Then continue configuring the photo/video upload settings.

- **Upload Photo:** Enable and click **Setup** if you want to upload photos from the cameras.



Channel: Select the channels where you want to upload the photos to Dropbox.

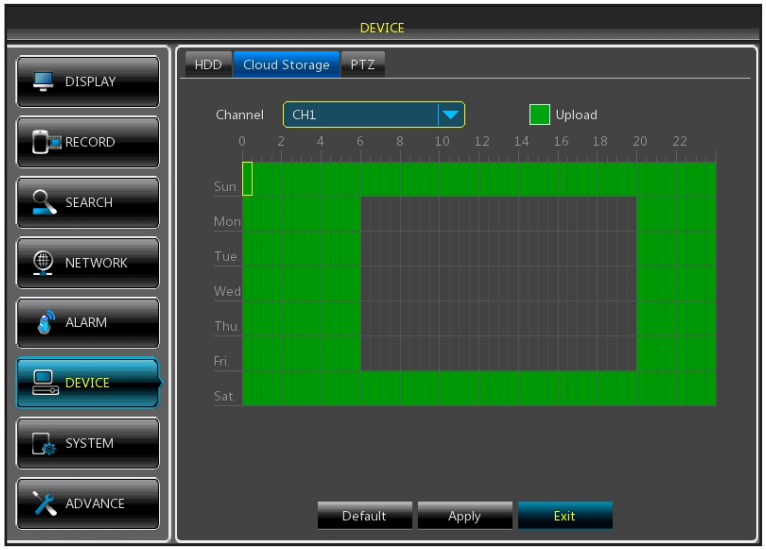
Interval: Set the photo uploading interval.

Motion Detection: Enable if you want to upload photos to Dropbox when the camera detects a motion. Click **Motion Setup** if you have not yet set the motion area. Please see "Alarm: Motion" on page 61.

NOTE: Photos will be uploaded only on a set time interval or if a motion is detected.

Click **Apply** to save the settings for **Upload Photos**.

- **Upload Video:** Enable and click **Setup** if you want to upload videos from the cameras when a motion is detected.



Channel: Select the channel where you want to upload the videos to Dropbox. When the day/time slot is marked green, it means the videos are uploaded to Dropbox when a motion is detected during the specified day/hour.

NOTE:

- You can only choose one channel where to upload videos.
- In one hour the system uploads maximum 3 footages.
- The maximum duration of each uploaded footage is 10 seconds.

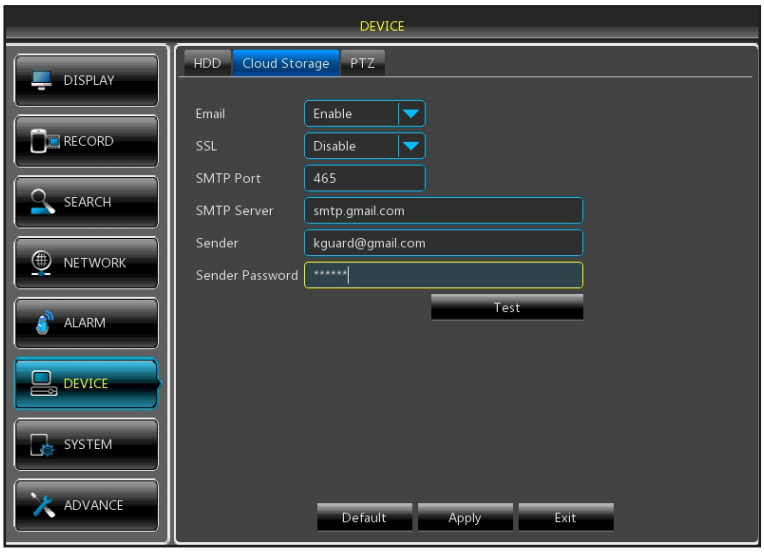
Click **Apply** to save the settings for **Upload Video**.

After all settings are complete, click **Apply** and then click **Activate Cloud**. If you successfully receive the cloud storage activation e-mail, you do not need to configure the advanced e-mail settings.

TIP: See the connection status below the screen. For example, a notification of a successful connection:

NOTE: Every time the cloud storage account is changed or HDD is formatted, you must activate cloud again to recognize the changes.

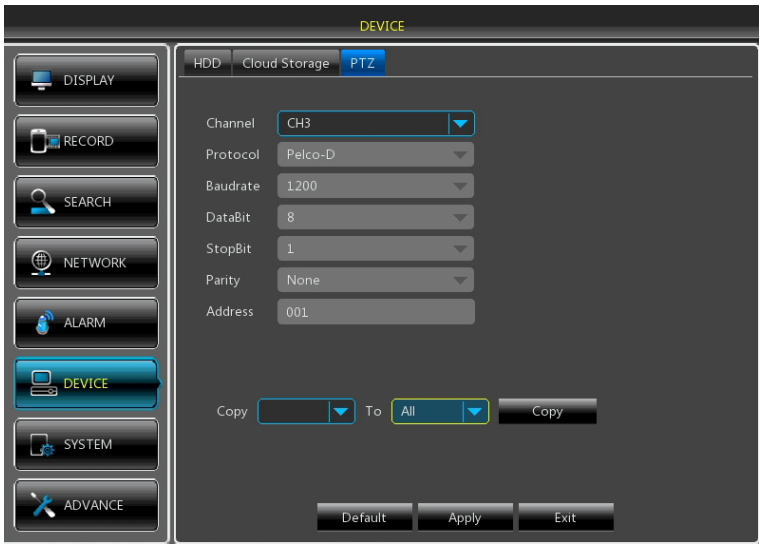
If you need to configure the advanced e-mail settings, click on **Advanced E-mail Setup** button.



- **Email:** Enable advanced e-mail setup.
- **SSL:** Enable if your e-mail server requires the SSL verification. If you are not sure, please consult your e-mail service provider. For example, if you are using Gmail then this option should be enabled.
- **SMTP Port:** Enter the SMTP port of your e-mail server. For example, if you are using Gmail, the SMTP port is 465.
- **SMTP Server**: Enter the SMTP server address of your e-mail.
- **Sender**: Enter the e-mail address of your e-mail.This e-mail address is used by the NVR only for sending you the activation e-mail for asking your acceptance to link the NVR to the Dropbox.
- **Sender Password**: Enter the password of your e-mail.

After all settings are complete, click **Apply**. For testing the settings, click **Email Test**.

Device: PTZ (Not Supported in Mars Home NVR)



NOTE:

- To use the PTZ (Pan-Tilt-Zoom) function, the camera must support this function.
- We recommend to modify the PTZ menu if you are an advanced user.

This menu allows you to configure the NVR to behave as a PTZ controller for a speed dome camera. If your camera does not support PTZ function, you need to purchase a separate PTZ controller for the camera.

- **Channel:** Select the channel you want to set the PTZ control.
- **Protocol**: It is very important to configure this parameter correctly. The task of the protocol is to make the NVR "understandable" for the PTZ-capable camera.
- **Baudrate**: The speed of the information sent from the NVR to the PTZ-capable camera. Make sure it matches the compatibility level of your PTZ-capable camera.
- **DataBit/StopBit**: The information between the NVR and PTZ-capable camera is sent in individual packages. The **DataBit** indicates the number of bits sent, while the **EndBit** indicates the end of the package and the beginning of the next (information) package. The available parameters for **DataBit** are the following: **8**, **7**, **6**, **5**. The available parameters for the **StopBit** are **1** or **2**.
- **Parity**: Is necessary for error check. See the documentation of your PTZ-capable camera, to configure this setting. The available options are the following: **None**, **Odd**, **Even**, **Mark**, or **Space**.
- **Address**: Set the command address of the PTZ system. Please be noted that each PTZ-capable camera needs a unique address to function properly.

System: General

In this menu you can configure the system general settings.

- **Date/Time**: You can set the date and time manually or allow the NVR to update automatically, using the NTP (Network Time Protocol). If you decide to modify manually then click on the date/time box and via on-screen keyboard enter the current date and time.
- **Date Format**: Define the format of the date. For example, if you keep the default **MM/DD/YY** and today's date is November 19th, 2013, the date appears on the footages as 11/19/2013.
- **Time Format**: Define the format of the time. For example, if you keep the default **24Hour** and the current time is 5:29:54 PM, the time appears on the footages as 17:29:54.
- **Language**: The language of the menus, alerts and other communications on NVR.
- **Flicker**: 50 Hz or 60 Hz, depending on your geographical location. For example, in USA the flicker should be set to 60 Hz, if set to 50 Hz, then the live video from the camera will be flickering.
- **Menu Timeouts**: Define the time the NVR will exit the menus when they are not in use and return to the Live Viewing screen.
- **Show Wizard**: Check this option if you want the Startup Wizard to reappear every time the device is turned ON. Normally you would go through some or all of the items in the wizard at first startup of the NVR.

System: DST

Configure these parameters if you want to update the NVR's clock automatically when daylight saving time starts and ends.

- **DST**: Stands for Daylight Savings Time. Make sure if in your country the DST is observer or not. Typically the clocks are adjusted forward one hour near the start of spring and are adjusted backward in autumn. Although NTP (Network Time Protocol) allows you to synchronize the NVR with a remote time server over Internet, please be noted that some of the NTP servers are not fully compatible with DST.
- **Time Offset**: Select the amount in hours by which the time changes during DST.
- **Daylight Saving Time**: Choose to set the daylight saving time in weeks or in days.
- **Start Time/End Time**: Set the start time and end time for daylight saving.

ENGLISH

System: NTP

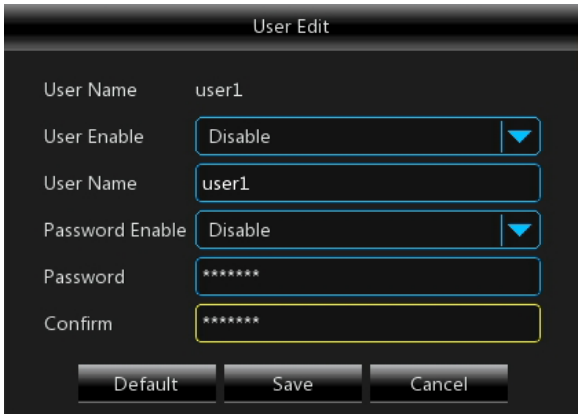
Configure these parameters if you want to synchronize the NVR's clock automatically with an Internet time server.

- **NTP**: Stands for Network Time Protocol. Enable this function to allow your NVR to synchronize the date and time parameters with a remote time server over Internet.
- **Server Address**: Select your preferred online time server. The available time servers are **pool.ntp.org**, **time.windows.com**, and **time.nist.gov**.
- **Time Zone**: Select the time zone in your location.
- **Update Now**: Click **Update Now** to automatically synchronize the time set on NVR with a remote time server on Internet.

System: Users

The Users menu allows you to view, change the password, authorize user and set the access rights in using the NVR. There is one administrator account and 6 user accounts. By default, the administrator account's user name is "**admin**" and the password is "**123456**". We suggest you change the password, to protect your privacy.

To enable/disable the user, enable/disable the password, or change the password, first select the user and then click **Edit**. The User Edit menu opens.



Click **Save** to save the changes or click **Default** to restore the factory default values. Click **Cancel** to return to the main user configuration screen.

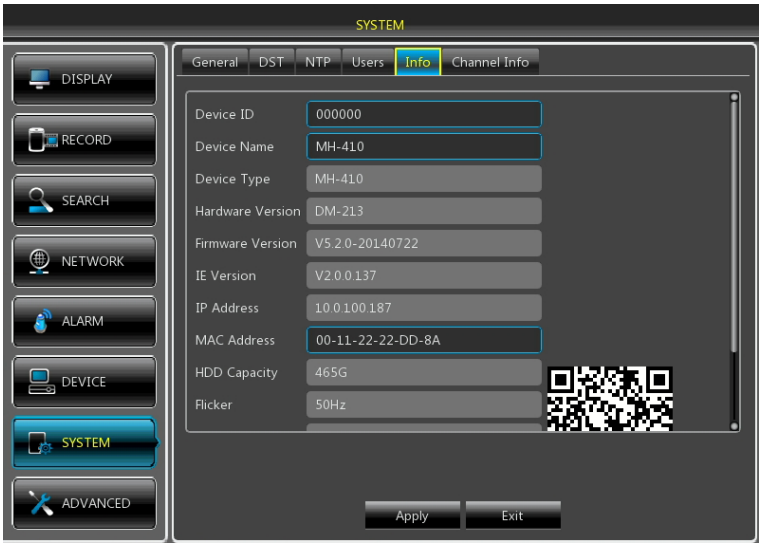
To modify the user access rights, first select the user and then click **Permissions**. The User Permissions menu opens.

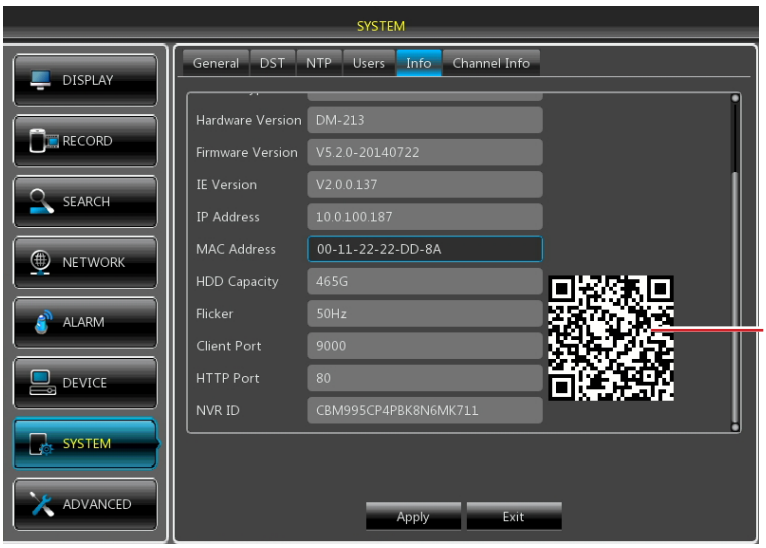
Select the access rights for the user and click **Save**. If you want to apply all the right to the user, click **All** and then click **Save**. To discard the changes, click **Clear**. Click **Cancel** to exit without saving.

NOTE: The access right of the default administrator account cannot be modified.

System: Info

In this menu you can review all the technical information concerning your NVR.





NOTE: If you need to scan the QR code of the NVR but the sticker with the code on top of the device has got damaged or is out of reach, then here you can find the device's QR code here.

System: Channel Info

In this menu you can review the basic information of the channels, like alias, state, mainstream/substream parameters, motion recording, privacy zone(s), and PTZ support.

NOTE: To make modifications to these parameters, please refer to their respective menus.

Advanced: Maintain

- **Auto Login**: If you want to log in to the NVR automatically for live view after each startup, then only Admin user account can be set for auto login.
- **Auto Reboot**: Set the setting to **Enable** to allow the NVR to automatically reboot on a specified schedule. When the NVR reboots, all settings and data are refreshed from the system which optimizes the NVR performance. To disable this function, set the setting to **Disable**.
- **Reboot**: Please note, that It is recommended to reboot the NVR once a week. The system supports three types of auto maintenance schedules. Options are:

  a. **Every week**: Reboots the NVR on a weekly basis. In Reboot, select **Every week** and specify the day of the week and the time to reboot the device.

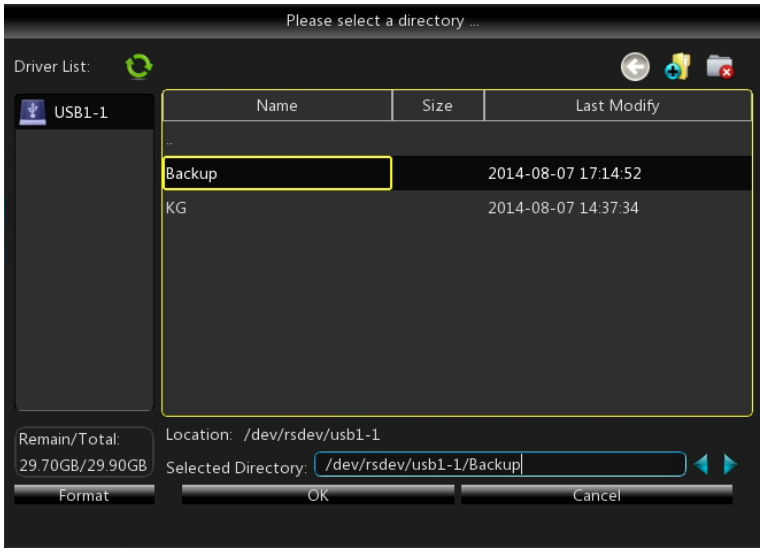
b. **Every month**: Reboots the NVR on a monthly basis. In Reboot, select **Every month** and specify the date (1 to 31) and the time to reboot the device.

c. **Every day**: Reboots the NVR on a daily basis. In Reboot, select **Every day** and specify the time you want to reboot the device.

NOTE: The available fields vary depending on the selected **Reboot** options.

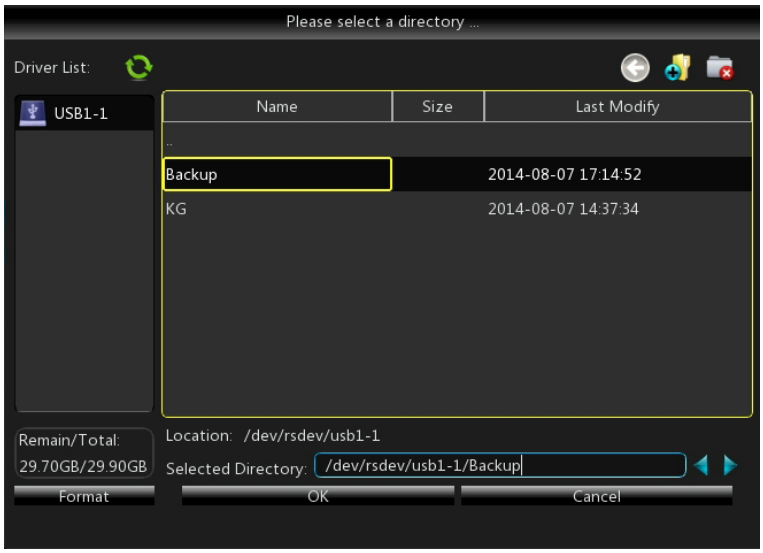
- **Update**: This option allows you to update the NVR firmware with the latest version. Obtain the firmware upgrade file. Save the file to a USB storage device and plug in to the USB port of the NVR. Click **Update** button, select the upgrade file and click **OK**.

  IMPORTANT: Do not remove the USB storage device or power off the NVR while system upgrade is in progress.

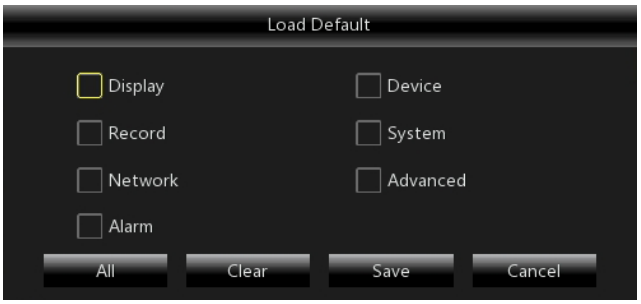


- **Camera Upgrade**: This option allows you to upgrade the camera. Obtain the camera upgrade file. Save the file to a USB storage device and plug in to the USB port of the NVR. Click **Camera Upgrade** button, select the upgrade file and click **OK**.

  IMPORTANT: Do not remove the USB storage device or power off the NVR while system upgrade is in progress.



- **Load Default**: Click **Load Default** if you wish to retrieve the factory default settings.

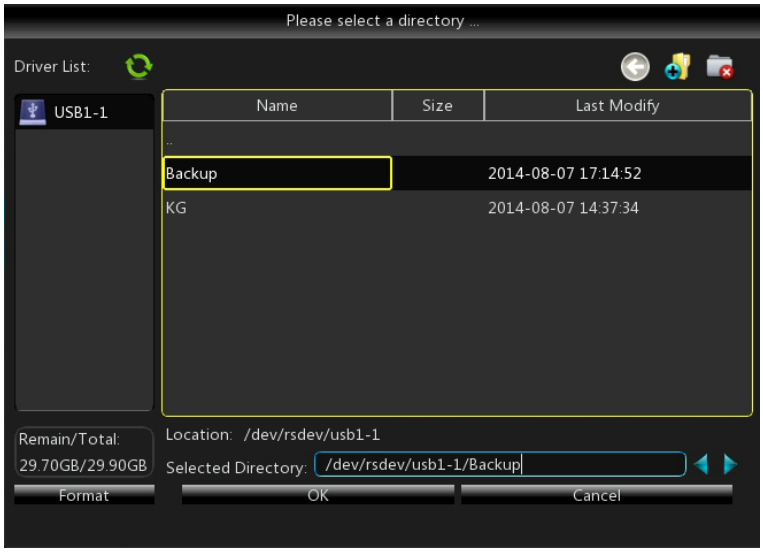


Check the respective setting option box that you want to restore and then click **Save**. If you want to select all the options, click **All** and then **Save**. To discard the changes, click **Clear**. To return to the advanced menu without saving settings, click **Cancel**.

NOTE: We recommend to load defaults for all options after the firmware upgrade. Please note that all current settings of NVR will be deleted after the factory default settings are retrieved.

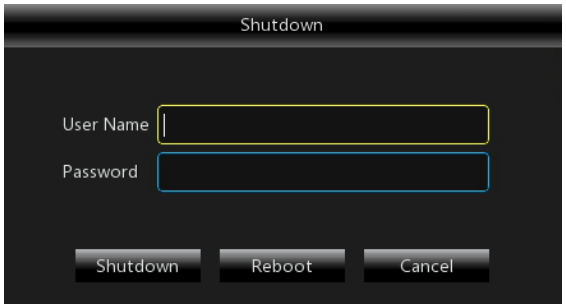
- **Load Settings**: Select this option to import the settings that you have saved earlier, using the **Save Settings** function.
  Plug in the USB storage device to the NVR with the system settings file on it. Click **Load Settings** button. Select the file and click **OK**.

IMPORTANT: Do not remove the USB storage device or power off the NVR while updating the system settings.



Wait until the procedure is complete.

- **Save Settings**: Select this option to save the NVR current settings such as the video recording settings, network configurations, and etc to the USB device.
- **Shutdown**: Click **Shutdown** to reboot or shut down the NVR. You are prompted to enter your user name and password.

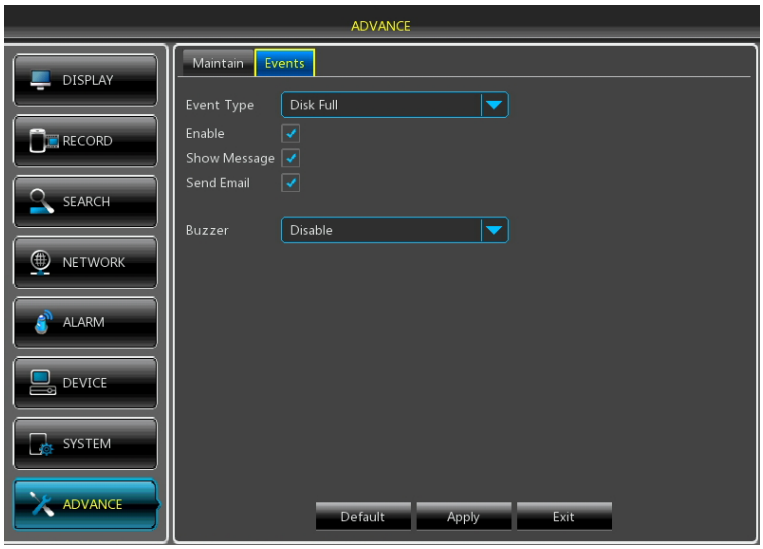


Click **Shutdown** to shut down the system. Click **Reboot** to reboot the system.

- **Online Upgrade**: Click **Online Upgrade** to upgrade the system over Internet directly.

ENGLISH

Advanced: Events



In this menu you can configure what action the NVR should do when an event occurs. It allows you to monitor the situation with the HDD, to prevent happening a situation when the NVR is not able to record the video from the cameras to the internal HDD or when a connection to the camera(s) is lost.

- **Event Type**: Select the event type you want to configure among **Disk Full**, **Disk Error,** or **Video Loss**.
- **Enable**: Click to enable the monitoring of the event.
- **Show Message**: Check the box to display a message on screen when the alarm is triggered.
- **Send Email**: You can let the NVR to send you an auto-e-mail when an alarm occurs. To set up the e-mail schedule, see “Network: Email” on page 57.
- **Buzzer**: You can set a buzzer sound if a disk becomes full, disk is in error state or a connection to the camera is lost. The available time period for the buzzer sound is from 10 seconds to 60 seconds. For example, if Disk Full event is triggered, the buzzer will sound for 10 seconds (please see the screenshot above). If you do not want to associate a buzzer with an event, then select OFF from the drop-down menu.

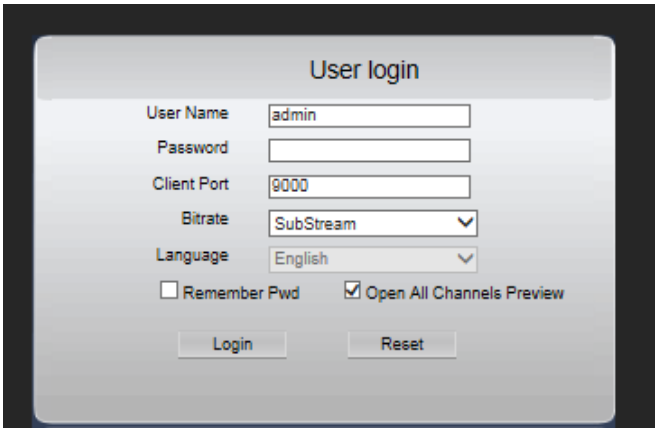
Remote Access Via Web Client

Use the Web Client to remotely access your NVR at anytime via a PC. Before you access the Web Client, you need to ensure that the network settings of the NVR are configured properly. The most convenient and easiest way is if you have set the NVR a static IP address (see "Network:Static." on page 55). It means you only need to open the web browser on your PC and type in the static IP address you have set on the NVR. However, if the IP address of the NVR is assigned by a DHCP server (see "Network:DHCP." on page 55), then it means that each time you reboot the NVR, the IP address changes. In this case, ask if your ISP can provide you a static IP address. If not, then configure the DDNS service. See the network settings in "Network: Network" on page 54 and "Network: DDNS" on page 58. Also, please make sure the UPnP is configured in the NVR and router, or if the router does not support UPnP, then make sure the port forwarding is completed manually. Please see the customized free guide at *http://portforward.com/kguard*.

Logging In

To access the NVR remotely from a PC, open your computer web browser and enter the NVR static IP address or DDNS domain name (Host Name) you have set on NVR in the URL box.

The User login page opens.



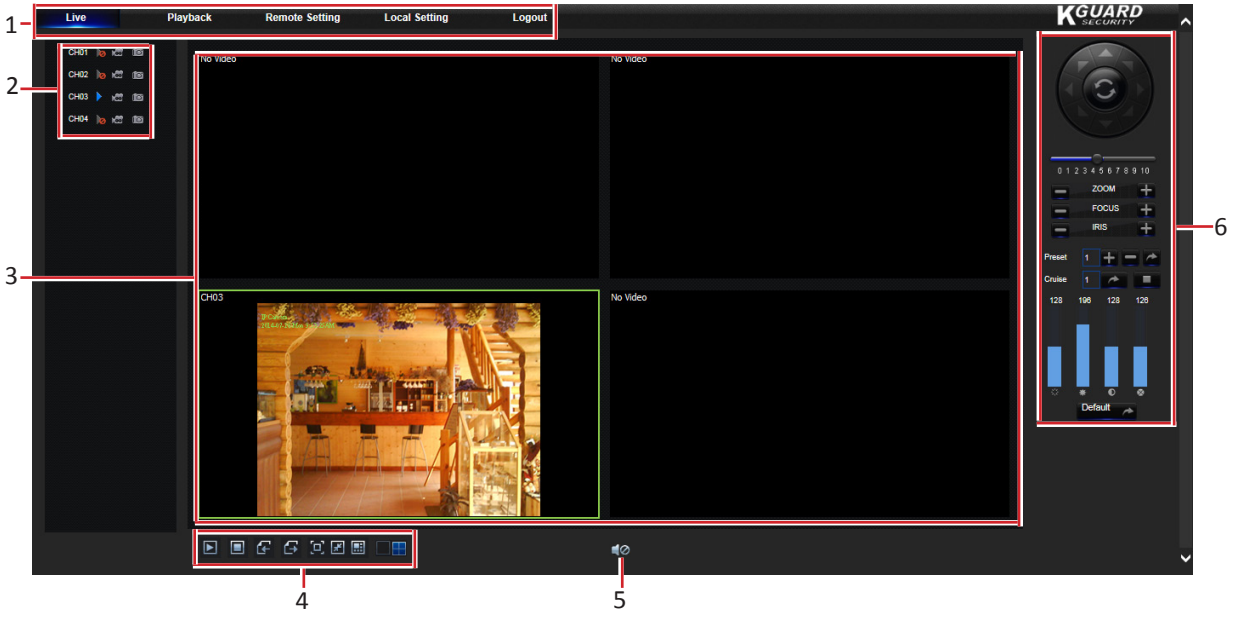
Enter the user name and password. Click **Login** button.

NOTE:

- The default NVR user name is "**admin**" and default password is "**123456**".
- The client port number must exactly match with the client port set on NVR. See "Network: Network" on page 54.
- Click **Remember Pwd** if you want to log in automatically.

Interface Overview

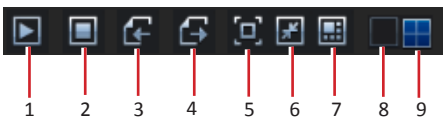
After you log in to Web Client, the live screen appears.



No.	Item	Description
1	**Main Menu**	Click a menu item to access. Options are: • **Live**: For viewing the Live screen, manual recording and snapshots. • **Playback**: Allows you to search, playback, and download recorded videos stored on the HDD inside the NVR. • **Remote Setting**: Allows you to configure the NVR remotely. • **Local Setting**: Allows you to specify the local disk drive location to save recorded videos, captured screen shots, and downloaded videos. • **Logout**: Click to logout from the Web Client.
2	**Channel Controls**	Lists all channels that can be connected to the NVR. The icons of each channel are used to manage the channel.
3	**Display Screen**	Displays the channels in grid mode or full screen mode.
4	**Display Controls**	Controls for live viewing display, switching screen modes.
5	**Audio**	Turn off or turn on the audio. **NOTE**: The audio function is available only with the ICB-100 camera.
6	**PTZ Controls** (not supported in Mars Home NVR	Manage the PTZ speed dome. **NOTE:** The PTZ control menu is active only for those cameras that support this function.

Live Viewing

From the Live screen, use the Display Controls to open or close the channels and switch between screen modes.

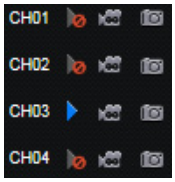


No.	Button		Description
1	**Open All Channels**		Click to open all channels for viewing.
2	**Close All Channels**		Click to close all channels for viewing.

No.	Button		Description
3	**Previous**		Click to view the previous channels.
4	**Next**		Click to view the next channels.
5	**Full Screen**		Click to view the channels in full screen mode.
6	**Stretch**		Click to stretch the screen. Click it again to return to the original proportions.
7	**Display / Hide Screen Modes**		Click to display or hide the screen mode icons.
8	**Full Screen Mode**		Click to view the channel in full screen mode.
9	**4-Split Screen Mode**		Click to view the channel in 4-split screen mode.

Viewing and Recording

From the Live screen, you can choose to view or hide a channel display, start manual recording, and capture screen shots of a channel.
Use the Channel Controls to manage individual channels and the Display Controls to manage all the channels at the same time.



Viewing or Hiding Channels

Click the view icon next to a channel to show or hide the channel display. The view icon indicates the current status:

- : The channel is displayed on the screen.
- : The channel is not displayed on the screen.

NOTE: icon indicates the camera is not connected or the connection to the camera has been lost.

Recording Channels Manually

Click the recording button next to a channel to start or stop manual recording. The recording icon indicates the current status:

- : The channel is being recorded.
- : The channel is not being recorded.

The recorded videos are saved in a local directory path. See "Local Settings" on page 81.

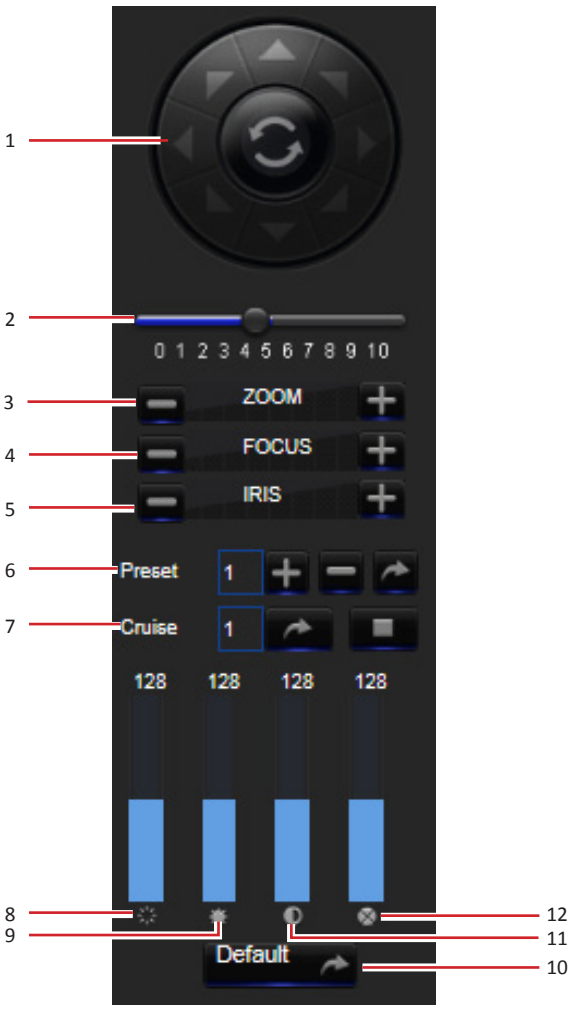
Taking Snapshots

Click the snapshot icon on the Channel Controls to take a snapshot of the current screen. Snapshots are saved in a local directory path. See "Local Settings" on page 81.

After taking a snapshot, a message appears on the screen to indicate where the snapshot is saved.

Using PTZ Controls (Not Supported in Mars Home NVR)

If you are using a PTZ speed dome camera, use the PTZ Controls to adjust the viewing scope other PTZ settings.



No.	Item	Description
1	**Pointer pan**	Click the direction arrows to select the direction of the PTZ camera. Click the middle icon to switch to auto pan.
2	**Speed**	Drag the slider to adjust speed.
3	**Zoom**	Click the "-" or "+" icon to adjust the zoom setting.
4	**Focus**	Click the "-" or "+" icon to adjust the focus setting.
5	**Iris**	Click the "-" or "+" icon to adjust the iris setting.
6	**Preset**	Set the preset point, then click to go to the preset point.
7	**Cruise**	Click to start cruise. Click to stop cruise.
8	**Hue**	Click on the bars to adjust the hue setting.
9	**Brightness**	Click on the bars to adjust the brightness setting.
10	**Contrast**	Click on the bars to adjust the contrast setting.
11	**Saturation**	Click on the bars to adjust the saturation setting.
12	**Default**	Click **Default** or to restore the default PTZ camera settings.

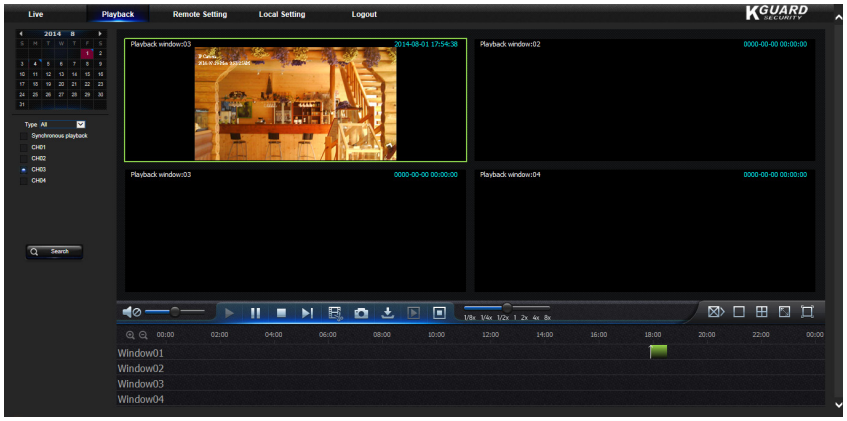
About the Main Menu

Because the Main Menu items of the Web Client are very similar to the OSD (On-Screen Display) Main Menu items, if you want to find more information on a specific item, please refer to "Main Menu" on page 41.

- To find more information on Playback, please see "Search: Record Search" on page 48.

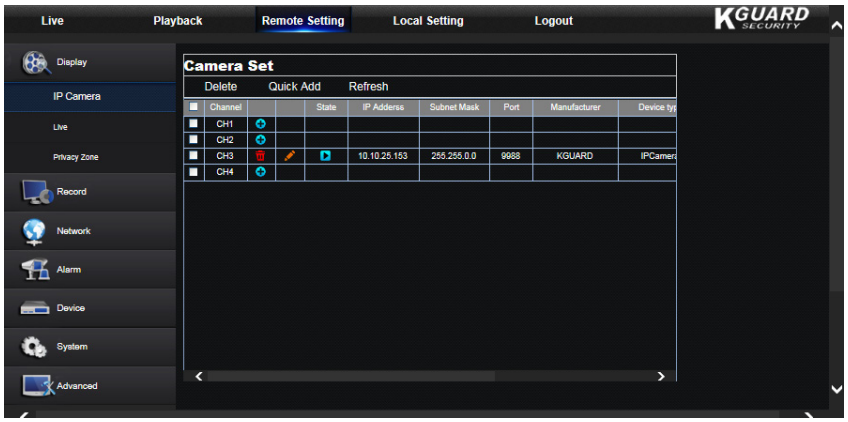
NOTE: You can look for recorded files stored on the HDD inside the NVR, and save the result to the local directory on your PC. To configure the local directory, please see "Local Settings" on page 81.

Web Client -Playback



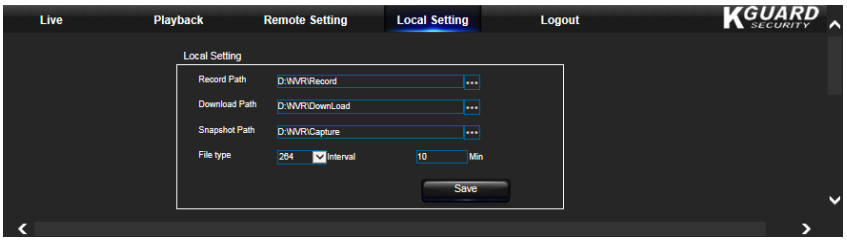
- To find more information on configuring the Remote Setting, please see "Main Menu" on page 41.

Web Client -Remote Setting



Local Settings

Here you can set the default paths for saving the recording, downloads, snapshots and configure the default file types. To set the default paths and file types, click the Local Setting tab in Web Client interface.
A menu opens. Click ••• to select the path. You can also configure the File type among **.avi** or **264** (H.264 format) and set the interval (length of manual recording) in minutes. The file type and interval settings are for saving the manual recordings on PC.



Click **Save** to save the modifications.

Logging Off

If you want to log off, click the **Logout** tab in Web Client interface.

Appendix

Troubleshooting

If you experience any problems in using the NVR, try the following solutions to these common problems before calling for service. If problems persist, contact the customer service in your area.

Question: The NVR does not turn on and the indicators are not lit.

Answer:

- Check if the power adapter (15V/3A) is properly connected.
- Plug the power cord to another power outlet, the current outlet may be damaged.
- The power cord may be damaged, contact the dealer to purchase a new one.

Question: Some channels have no video signal.

Answer:

- Check if the camera is properly connected.
- The camera cable may be damaged, replace with a new one.

Question: I have changed the administrator password but I cannot remember it.

Answer:

- To obtain the factory default password, contact your retailer or directly send an email to KGUARD at support@kguardsecurity.com.

Question: The remote control is not working.

Answer:

- Make sure nothing is blocking the remote control and the NVR sensor. Aim the remote control at a proper distance.
- Check the remote control batteries.

Question: The NVR does not connect to my Dropbox account or Google Drive.

Answer:

Dropbox and Google Drive:

- Make sure you have installed a hard drive in the NVR (see "Step 2: Install the Hard Disk Drive (HDD)" on page 7), formatted the hard drive (see "Device: HDD" on page 63).
- Make sure your NVR has an access to the Internet (WAN port is connected) and Network settings on NVR are completed. See "Network: Network" on page 54.
- Check that the Cloud Storage function is enabled. See "Using Cloud Storage" on page 32.
- Reboot your NVR. See "Advanced: Maintain" on page 73.
- Make sure you have enabled the sending photos and/or videos function.
- Make sure the channels where you want to upload photos and/or videos are properly configured.

Dropbox:

- Make sure your have responded to the NVR's activation e-mail within 3 minutes. If more time has passed, click **Activate Cloud** button again in NVR's Main Menu to resend the activation e-mail. See "Using Cloud Storage" on page 32.
- Make sure the **Receiver Email** is correct. See "Using Cloud Storage" on page 32.
- If you have configured Advanced e-mail settings, make sure the SMTP server name, port, SSL condition are configured correctly and the sender e-mail address and password are typed in correctly. See "Using Cloud Storage" on page 32.

Google Drive:

- Make sure you have entered correctly your Gmail account and password.

Question: I am getting too many email alerts.

Answer:

- Check the Sending Interval setting for the email alerts. See “Network: Email” on page 57.
- If the NVR keep reporting errors such as Video Loss or HDD error, check if the camera is properly connected or other hardware configurations.

Question: I cannot access the web client.

Answer:

- Check if the network cable is properly connected to the NVR.
- Check if the UPnP function is enabled in router and NVR or if the router does not support UPnP, then make sure the port forwarding is completed.
- Check if the network settings are properly configured. See “Network: Network” on page 54.
- Ensure that you have Internet Explorer 8 or above.

Question: The buzzer keeps on sounding.

Answer:

- Check the alarm settings. Motion Detection or Video Loss may be detected. Check the HDD capacity and the video connections, which may be triggering the alarm.

Specifications

NVR	MH-410
Cloud	
Cloud Storage	Dropbox / Google Drive
Storage Mode	Schedule / Motion Detection
Video	
Video Input	4 LAN ports
Video Output	1 VGA, and 1 HDMI output
Video Output Resolution	1024x768, 1280x1024, 1440x900, 1280x720, 1920x1080
Audio	
Audio Compression	G.711
Audio Output	Through HDMI monitor/TV
Recording	
Video Compression	H.264
Recording Resolution	4 x 30fps @ 720p
Recording Mode	Manual / Always / Schedule / Motion Detection / Remote Recording
HDD Interface	1 SATA
HDD Support	Up to 4TB
Network	
KView Easy Connectivity	Yes, KView QR
Network Interface	1 WAN port
Network Protocol	DHCP, PPPoE, Static IP
Browser Support	IE 8.0 or above & Safari
Playback	
Local Playback	4 x 30fps @ 720p
Remote Playback	4 channels simultaneously via browsers
Playback Search	Time & Date, Motion Detection
Playback Mode	Play, Fast Forward, Fast Rewind, Zoom, Frame by Frame
General	
IR Extender Port	No
Sensor IN & Alarm OUT Port	No
Trigger Event	Recording, E-mail, Buzzer, Full Screen, Show Message
Backup Method	USB Flash Drive, USB HDD, Network
Power Consumption (W/HDD)	45W
Power Supply	DC 15V/4A
Camera Power Supply over PoC	Yes (up to 60 meters)
Operating Temperature (W/O HDD)	0° to 55°C (32°F to 131°F)
Working Humidity	10%~90%
Dimension with docking stand (LxWxH)	193 x 90 x 208 mm

Camera	ICB-100 x 2 PCS	ICB-200 x 2 PCS
Image Sensor	1/3” Mega Pixel CMOS Sensor with IR Cut Filter	
Max. Resolution	1280(H) x 720(V)	
Lens	3.6mm fixed, F1.2	6mm fixed, F1.2
Viewing Angle	75°	45°
Night Vision	20 meters	30 meters
Audio	Yes	No
Power Socket	Yes	
Minimum Illumination	While Infrared LED on “0” lux	
Day / Night Mode	Color during day / switches to B&W at night	
Electronics Shutter	1/3 ~ 1/10,000 (sec)	
Waterproof	IP66	
Operating Temperature	-10 °C ~ 60 °C (14°F ~ 140°F)	
Power Supply	12 VDC ± 10%, PoC	
Dimensions	150x63x61mm	
Weight	420g	

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2. Specifications are subject to change without notice.

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Customer Support

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